The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1202.—Vol. XXVIII. LONDON, SATURDAY, SEPTEMBER 4, 1858. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, MINING AND SHAREBROKER, No. 1, FINCH LANE, LONDON (established 14 years), TRANSACTS every kind of BUSINESS in MINING SHARES, but, not being a DEALER, BUYS and SELLS on orders confided to him.

Mr. Crofts refers the readers of the Journal to his article on the changes and phases of the market, on page 578, in which will be found general and particular discussions on the value of mining property, on, or irrespective of, the market; his opinions being guided by experience, but not offered as infallible. He will be happy to advise capitalists into safe investments at all times.

*** Special business in Old Tolgus United, either to SELL or BUY.

MR. JAMES LANE, No. 29, THREADNEEDLE STREET, MINING SHARE DEALER.

JAMES B. BRENCHLEY, 19, TOKENHOUSE YARD, LONDON, transacts BUSINESS, as a BUYER or SELLER, in DIVIDEND and PROGRESSIVE MINES, for CASH.

Bankers: London and Westminster, Lothbury.

SPECIAL REPORT (WEEKLY) WILL APPEAR IN PETER WATSON'S "MINING CIRCULAR," by his own Agents. ABRIDGED REPORTS will also be given, and important information on the present and future operations and prospects of mines throughout Cornwall and Devon, with advice thereon as to purchase or sale of shares.

Those who desire to have copies regularly sent them will be supplied for an annual subscription of £1 1s., or 6d. per copy. PETER WATSON.

English and Foreign Stock, Share, and Mining Offices,
3, Old Broad-street, London, E.C.

SPECIAL REPORTS ON

WHEAL BASSET.	KELLY BRAY.
CALSTOCK CONSOLS.	DING DONG.
TREBARVAH.	WHEAL HARRIETT.
GREAT WHEAL ALFRED.	EAST BASSET.
NORTH ROSKEAR.	PENDEEN.
REDMOOR.	WHEAL GRENVILLE.
WENDRON CONSOLS.	GAWTON.
DRAKE WALLS.	WEST ALFRED CONSOLS.
WEST TREVELYAN.	PEDN-AN-DREA.
SOUTH BASSET.	NORTH DOWNS.
WEST FRANCES.	EAST ALFRED CONSOLS.
PROVIDENCE.	NORTH FRANCES.

Published in PETER WATSON'S Weekly Circular and Share List.

MR. H. B. RYE DOES NOT ADVERTISE PRICES OF MINING SHARES, because the practice is highly prejudicial to mining enterprise, and to public interests. The prices advertised are no guide whatever in investing, and no reliance can be placed upon them. In consulting these advertised prices, it will always be found that many eligible investments are WILFULLY depreciated, and many rotten and utterly worthless concerns foisted upon the public. Mr. Rye begs, however, to state that, having a large connection, and practical experience extending over 18 years, he is enabled to offer the soundest advice regarding LEGITIMATE investments, and to transact business upon terms most advantageous to his clients.

Offices, 77, Old Broad-street, E.C.

SHARES WANTED.—

Kitty (Lelant).	Alfred Consols.	Levant.
Grambler and St. Aubyn.	Carn Brea.	Rosewarne United.
Providence.	South Carn Brea.	West Seton.
Clijah and Wentworth.	United Mines.	Mary Ann.
Camborne Vean.	Hingston Down.	Great Wheal Vor.

H. B. RYE, 77, Old Broad-street, Sept. 3, 1858.

THOMAS ROACH, MINING AGENT, 37, OLD BROAD STREET, E.C.

MR. LELEAN, MINE AND SHAREDEALER, 4, CUSHION COURT, OLD BROAD STREET, Commission, 1¼ per cent. on all transactions.

NO CAPITALISTS.—RELIABLE INFORMATION may be obtained on application to the undersigned, in respect of MISCELLANEOUS SECURITIES generally. BANKS, INSURANCE SHARES, LAND COMPANIES, MINES (British and Foreign), RAILWAYS, FOREIGN STOCKS, and the PUBLIC FUNDS BOUGHT and SOLD at the closest market price, and at moderate commission. References given and required. JOHN BATTERS, Stock and Sharebroker. 26, Throgmorton-street, London, E.C.

FIFTEEN to TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM upon current value of shares, in CORNISH TIN and COPPER MINES. Dividends payable two-monthly or quarterly.

MR. R. TREDINNICK, MINING ENGINEER, SENDS his SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES on the receipt of a Fee of One Guinea.

Review of Cornish and Devon Mining Enterprise, 5s. per copy.

Maps per post of the Buller and Basset, Great Vor, Alfred Consols, the Providence and Margaret, South Caradon, and the Devon Great Consols Districts, 2s. 6d. each.

Cornish Mines, well selected, pay better than any other description of securities, are freer from risks, and entail less responsibilities than banks and other joint-stock companies. Shares bought and sold on commission of 2½ per cent.

Money advanced at 10 per cent. annually, for short or long periods, upon approved Mine Shares.—4, Austinfriars, Old Broad-street, London, E.C.

MR. JOHN RISLEY, MINE SHARE BROKER, JAMAICA COFFEE HOUSE, ST. MICHAEL'S ALLEY, CORNHILL, LONDON. Commission, 1¼ per cent.

Mr. J. Risley recommends the following dividend and progressive mines to the especial notice of capitalists:—South Caradon, Par Consols, Carn Brea, Wheal Trelawny, Vale of Towy, Great South Tolgus, North Downs, East Basset, and Pendeen Consols.

Mr. J. Risley has frequently drawn the attention of capitalists to Pendeen Consols mine, being one of more than ordinary promise, believing it will ultimately prove one of the richest mines in the district.

HENRY GOULD SHARP, 32, POULTRY, LONDON, E.C., Recommends the IMMEDIATE PURCHASE of the following SHARES, at present market prices:—

DIVIDEND MINES.		Vale of Towy.
Alfred Consols.	North Wheal Basset.	West Basset.
Carn Brea.	Par Consols.	West Wheal Seton.
Dolcoath.	Providence Mines.	Wheal Basset.
Great South Tolgus.	South Caradon.	Wheal Buller.
Marke Valley.	South Wheal Frances.	Wheal Mary Ann.
PROGRESSIVE MINES.		
Copper Hill.	Lady Eliza (Limited).	South Garras.
East Basset.	North Frances.	Wheal Agar.
East Wheal Russell.	Pedn-an-drea.	Wheal Grenville.
Great Caradon.	Penstruthal.	Wheal Harriett.
Great Wheal Alfred.	Redmoor.	Wheal Ludcott.
	South Carn Brea.	

N.B.—Mr. Sharp has just returned from Devon and Cornwall, and is in a position to give correct and good information as to the best and safest mines for present investment.

SHARES FOR SALE:— 200 Catherine & Jane (calls paid), 5s. 5 Par Consols, £17 1s. 3d. 1 Wheal Harriett, 19s. 6d. 35 Sortridge Cons., 23s. 6d. 10 Great Alfred, £4 1s. 3d.

Stocks and shares of every description bought and sold on commission of 1¼ per cent.

SHARES WANTED:— 1 Wheal Basset, £196. 2 Old Tolgus United, £25.

2, Poultry, London, Sept. 3, 1858.

GEORGE BUDGE, of 4, ROYAL EXCHANGE BUILDINGS, LONDON, has SHARES FOR SALE at the following prices:—2 Rosewarne, £2; 50 Wheal Grenville, 33s.; 100 West Grenville, 8s. 6d.; 50 Pendeen, £2½; 25 Great Wheal Vor, £3; 30 Great Wheal Alfred, £4¼; 20 Great Wheal Busy, £3½; 20 Wheal Kitty (St. Agnes), £3⅞; 4 Par Consols; 100 Tehidy, 20s.; 50 Trebarvah; 25 North Wheal Robert; 2 East Basset, £101; 1 Grambler, £150; 2 United Mines, £84½; Margaret, £60¾; 100 Wheal Arthur, 15s.; 50 Drake Walls; 100 South Condurrow, 6d.; 15 Camborne Vean, £22⅝; 20 Tincroft; 1 Wh. Basset, £200; 50 Tamar Consols, 1. 6d.; 150 Molland; 3 Gonamena; 50 Kinzigthal, 30s.; 100 Worthing, 5s. 6d. BUYER of 100 Pendeen, £3 6s.; 100 East Alfred, 15s.; and Grambler, £140.

MESSRS. FULLER AND CO., 51, THREADNEEDLE STREET, LONDON, continue to TRANSACT BUSINESS in BANKING, BRITISH and FOREIGN MINES, INSURANCE, RAILWAYS, &c. The great impetus given to mining, and the advantages over and above all known securities is apparent to the capitalists, who are quietly availing themselves of the opportunity afforded in securing both Dividend and Progressive Mines; the former paying safely 15 per cent., whilst the latter only attain that state, but rise in value from 1 to 500 per cent. The following shares present every prospect of success:—

Devon Burra Burra.	Hingston Down.	Wheal Margery.
Scarf Lead Mines.	Tolvadden.	Wheal Ludcott.
Sally virgin.	South Lady Bertha.	Tincroft.
East Wheal Russell.	United Mines, Tavistock.	West Caradon.

WANTED, 500 shares South Lady Bertha, at 6s. 6d.

Office Hours from Ten till Four.

GEORGE MOORE,
1, CROWN COURT, THREADNEEDLE STREET.

GEORGE MOORE will SELL the following SHARES, or any part, to-day, at quoted prices, FREE OF ANY COMMISSION:—

DIVIDEND.

25 Drake Walls, £1⅛.	10 Tincroft, £3 11s. 3d.	20 Wheal Arthur, 15s.
1 Rosewarne United, £35.	50 Vale of Towy, 16s. 9d.	10 Wheal Edward, £4.
25 St. Day United, 12s. 3d.	1 West Caradon, £97½.	10 Wheal Uny, £2¾.

NON-DIVIDEND.

1 East Basset, £100¼.	10 North Downs, £2 6s. 3d.	20 West Grenville, 8s. 6d.
10 E. Russell, £5 18s. 9d.	5 North Robert, £2¾.	20 Wh. Grenv., £1 13s. 9d.
10 Great Alfred, £4 1s. 3d.	10 Pendeen Consols.	20 Wheal Harriett, 19s. 6d.
10 New Wh. Frances, £1¼.	5 Penstruthal, £5⅝.	25 Wheal Zion, 3s. 6d.

GEORGE MOORE is a BUYER of East Russell at 5⅛, and Wheal Arthur at 10s.

PURCHASERS of undoubted respectability can register transfers and receive CERTIFICATES of same previous to PAYMENT.

In any business that GEORGE MOORE is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

MR. J. J. REYNOLDS, No. 1, ROYAL EXCHANGE BUILDINGS, LONDON, E.C., ENGLISH AND FOREIGN STOCK, RAILWAY, AND MINING SHAREBROKER, begs to inform his friends and the public that the present time is a FAVOURABLE OPPORTUNITY for INVESTMENT in many undertakings of a substantial character, paying dividends worthy the attention of the capitalist.

Every information can be obtained at his offices, which his practical experience enables him to give, not only of mines and other properties of established value, but of those that are not.

MESSRS. POWELL AND COOKE, DEALERS IN MINING SHARES, 8, HERCULES CHAMBERS, OLD BROAD STREET, LONDON.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

15 Bon Accord, 19s. 9d.	2 Kitty (Lelant).	10 Trewcatha, 20s. 9d.
10 Bryntail, 39s.	10 Kelly Bray, 41s. 6d.	3 Treiawny.
10 Boiling Well, 22s.	10 Lewis.	2 Rosewarne Utd., £34¾.
14 Catherine and Jane, 5l.	20 Ludcott, 30s. 9d.	10 Vale of Towy, 17s. 8d.
1 Cefn Brwyno, £37½.	20 Lady Bertha.	25 Virtuous Lady, 9s. 3d.
20 Cwm Sebon, 23s. 6d.	20 Nant. & Penr., 21s. 6d.	30 Wheal Cupid.
2 Clijah & Went., £43¾.	100 New Crow Hill, 6s. 9d.	1 Wh. Mary Ann, £45¾.
20 Chancellorsville, 1s. 6d.	20 North Downs.	1 Wheal Basset.
10 Drake Walls, 21s. 6d.	5 No. Basset, £9 11s. 9d.	5 Wheal Margery, £123¾.
30 Devon and Courtenay.	5 North Frances.	10 Wh. Edward, £9 18s. 9d.
1 Dev. Great Cons., £475.	20 Pem. & E. Crin., 12s. 6d.	5 West Basset, 22½.
5 East Russell, £5⅝.	3 Par Consols, £17 6s. 9d.	50 West Grenville.
20 East Rosewarne, 9s. 9d.	10 Sortridge Cons., 26s. 9d.	10 Wheal Zion, 2s. 9d.
5 East Wh. Rose, £4⅞.	15 Swanpool.	50 Willow Bank, 3s. 9d.
1 Gr. & St. Aub., £145.	5 South Wheal Ellen.	10 West Providence.
5 Great Alfred.	1 South Caradon, £4½.	1 West Caradon, £98½.
20 Garrey, 6s. 9d.	10 Trebarvah (last call of 20s. paid).	15 Wheal Arthur.
10 Grenville, 34s. 9d.		5 Wheal Jane.
10 Great Hewas, 12s. 6d.	20 Tamar Consols, 12s. 9d.	60 West Wheal Jane.
5 Hingston Down, £3⅞.	9 Tees Side.	30 Wheal Addams, 18s.
	5 Tincroft, £3 9s. 6d.	

Mr. Herron is glad to inform his friends that considerable activity has prevailed in the mining market during the past week, the public evidently at last giving to mining enterprise the attention it deserves. This may be attributed to the fact, which is daily becoming more firmly established, that well selected British mines pay much larger interest than any other channel of investment.

2, Adam's-court, Old Broad-street, London, Sept. 3, 1858.

MESSRS. VIVIAN AND REYNOLDS, MINE AGENTS, 68, OLD BROAD STREET, LONDON, E.C.

Messrs. Vivian and Reynolds are enabled, through the long experience of Mr. W. C. Vivian as an underground agent and manager of mines in Cornwall, and in various foreign countries, to afford information on most important mining districts; and to inspect and report on mines. They are also enabled, by the several years' acquaintance of Mr. J. J. Reynolds, jun., with the transactions of the London share market, to obtain every advantage for those who may want either to buy or sell mining or any other description of stock.

Messrs Vivian and Reynolds have daily information from the principal seats of mining, which is at the service of those who may honour them with their confidence.

Messrs. Vivian and Reynolds will SELL—

1 Wheal Basset, £200⅛.	1 Rosewarne.	25 East Rosewarne, 8s.
1 South Frances, £210.	25 Vale of Towy, 19s.	5 Stray Park, 32s. 6d.
5 Tincroft, £3 15s.	10 Camborne Vean, £2⅞.	1 North Roskear, £22½.
5 Alfred Consols.	10 Pendeen, £3 10s.	50 So. Condurrow, 3s. 3d.
5 Par Consols, £17¼.	5 West Stray Park, 35s.	5 East Russell, £6.
1 United, £85.	3 North Crofty, £4½.	5 Edward, £4.
1 Gramb. & St. Aub, £140.	5 North Frances, £7.	

They are BUYERS of Great Wheal Vor and East Rosewarne.

MINING SHARES FOR SALE, FOR IMMEDIATE CASH.—

25 No. Downs, £2⅜.	10 Treweatha, 21s.	3 Rosewarne United, £31.
10 East Alfred, £1⅛.	24 Wheal Glynn, 12s. 6d.	10 Gt. Wh. Alfred, £4¾.
5 Tincroft, £3⅜.	10 Wheal Wrey £3½.	75 Wheal Addams, 18s. 6d.
50 Devon Buller, 5s. 6d.	10 E. Wh. Russell, £5⅞.	50 Sortridge, 23s. 6d.
15 Grenville, 35s.	25 Pendeen, £3½.	100 Redmoor, 6s. 9d.
75 St. Day United, 15s.	5 Alfred Consols, £9½.	50 Camb. Vean, £1 18s. 9d.
20 Hingston Down, £3¼.	100 West Grenville, 9s.	20 Kelly Bray, £2½.
	1 East Basset, £100.	

Apply to W. Michell, 3, Austinfriars, London, E.C.

MR. S. RICHARDS, WOODLAND COTTAGE, STOKE, DEVONPORT, has FOR SALE the following valuable MINING SHARES, at the prices stated in this advertisement, up to Wednesday next:—

2 So. Wh. Frances, £220.	10 Calstock Consols, £5⅞.	20 West Grenville, 8s. 9d.
2 Providence, £61.	20 Wheal Sidney, £1⅜.	30 Lady Bertha, 10s. 6d.
2 East Basset, £110.	10 Pendeen, £3½.	1 Old Tolgus, £40.
10 East Russell, £5 18s. 6d.	20 North Trelawny, 15s.	25 Wheal Wrey, £3.
10 Tolvadden, £6¼.	20 Treweatha, 21s. 6d.	50 Raven Rock, 9s. 6d.
20 Wheal Crelake, £2¾.	50 Sortridge Cons., 25s. 6d.	2 Wh. Margaret, £59½.
	20 Wheal Harriett, 20s. 6d.	

The above are well worth the attention of investors in mining property at the present prices, it being exceedingly probable that before long they will considerably advance in price.

JOHN GLEDHILL AND CO., MINE AGENTS, SHARE BROKERS, AND GENERAL DEALERS
MINING RECORD OFFICE, 12, SOUTH PARADE, LEEDS.

Mines well selected are the best investments, paying from 15 to 30 per cent. on the outlay. They have to OFFER SHARES in most of the DIVIDEND and PROGRESSIVE MINES, and are ready to give every information relative to all mining matters.

Dated Aug. 13, 1858.

MR. BRENTON SYMONS, LAND AND MINERAL SURVEYOR, LITHOGRAPHER, &c., TRURO, will be happy to UNDERTAKE SURVEYS of every description, either at home or abroad. Mr. Symons having an office for lithography, can offer advantages to gentlemen who require LITHOGRAPHED PLANS, SECTIONS, &c., of MINERAL PROPERTY; having the whole work under his immediate superintendence, thus saving the time and expense necessary in transmitting the plans from the surveyor to the lithographer.

MINES SUPPLIED with CIRCULARS, CERTIFICATES, BOOKS, TUTWORK and TRIBUTE PAY-SHEETS, SHARE TRANSFERS, &c. Specimens sent free by post on application.

MR. H. HUXHAM, COLLIERY VIEWER AND MINING ENGINEER, UNDERTAKES the SURVEYING, VALUING, or AGENCY of MINERAL PROPERTY, the WINNING, WORKING, or VIEWING of COLLIERIES, &c., on moderate terms; and begs to assure those who may favour him with their commands that all business entrusted to his charge shall receive prompt attention, and be executed with the utmost fidelity and care. References and testimonials of the highest character.

Mr. H. Huxham has room for TWO ADDITIONAL ARTICLED PUPILS, who would have an excellent opportunity of attaining a thorough knowledge of practical and theoretical mining engineering.—Cwm Rhondda, Pont-y-pridd.

MESSRS. A. J. HUTCHINGS AND CO.'S PATENT IMPROVED WIRE ROPE.
SOLE MAKERS TO THE
LORDS OF THE ADMIRALTY, THE FRENCH AND TURKISH GOVERNMENTS,
And the principal Colliery Proprietors throughout the kingdom.
MANUFACTORY, MILL WALL, POPLAR, LONDON.

ROUND and FLAT ROPES of every description, suitable for mining operations or other purposes, GALVANISED or UNGALVANISED, MANUFACTURED upon the newest and most improved machinery, ensuring greater pliability, durability, and strength; and is admitted by the principal coal proprietors to be far superior to any other kind of wire-rope. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.

GUIDE ROPES, SIGNAL CORD LIGHTNING CONDUCTORS, &c.

MR. T. P. THOMAS, MINING AUCTIONEER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHARE DEALER, 11, DALE STREET, LIVERPOOL.

MR. WILLIAM MOORE, STOCK AND SHAREDEALER 11, HERCULES CHAMBERS, OLD BROAD STREET.
N.B. Business transacted in every description of stock and shares.

MR. R. LINTHORNE, ENGLISH AND FOREIGN MINING AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON.
N.B. Business transacted in every description of stock and shares.

MR. E. GOMPERS has BUSINESS to TRANSACT in most of the MINES usually in REQUEST in the MINING MARKET.
3, Crown-court, Threadneedle-street.

MICHAEL WILLIAMS BAWDEN, MINING, GENERAL ASSAYING, AND COMMISSION OFFICES, LISKEARD, CORNWALL.

Michael Williams Bawden being situated in a central position of the two western counties, can give every information to parties on mines that are really safe investments and otherwise. Mines inspected, and correctness of reports strictly adhered to.

DEVON GREAT ELIZABETH MINE.—FIFTY SHARES TO BE SOLD in this valuable MINE, at 17s. 6d. per share, to close an account.—Apply to E. Harris, Esq., 48, Fenchurch-street, City.

MINE CAPTAIN.—WANTED, an AGENT for a small COPPER MINE in the West of Cornwall. He must be competent to take the management, be of industrious habits, and produce an unexceptionable character. Salary, £8 8s. per month.—Apply by letter, addressed "F. C.," *Mining Journal* office, 26, Fleet-street.

A COLLIERY VIEWER FROM NEWCASTLE is OPEN to an ENGAGEMENT, either in this country or the Continent. Unexceptional references.—Address, "X. Y.," *Mining Journal* office.

MANAGER OF BLAST FURNACES—SITUATION WANTED.—A YOUNG MAN, who has had 15 years' practical experience in the iron trade, desires a SITUATION to MANAGE, or SUPERINTEND the MANAGEMENT of BLAST FURNACES. He is well acquainted with the manufacture of pigs, making plans, and superintending the erection of blast furnaces, and managing them; making out yields, costs, and book-keeping, and can be well recommended.—Address, "E. P.," *Mining Journal* office, 26, Fleet-street.

WANTED, a PUMPING ENGINE of about 70-in. cylinder, with suitable boilers, in good condition.—Particulars and price to be sent to D. G. Goatley, 31, Threadneedle-street, E.C., London.

STEAM ENGINE WANTED, about 40-horse power, adapted for WINDING and PUMPING purposes, for a colliery, in good working condition.—Address, stating full particulars and price, delivered at the Cannock station of the South Staffordshire Railway, to Mr. Piggott, contractor, Walsall.

TO IRONMASTERS.—WANTED, a SITUATION as FORGE and MILL MANAGER, by an experienced middle aged man, who has a thorough practical knowledge of the business in all its branches. Unexceptional references can be given.—Address, P. 39, *Journal* office, Birmingham.

TO MINERS AND DIVERS.—WANTED, by the chief constable of the county of Somerset, a PERSON COMPETENT, and who has all the necessary apparatus, to DESCEND into several COPPER MINE SHAFTS FULL OF WATER, for the purpose of SEEKING for the BODY of a CHILD, supposed to have been thrown down one of them. There are five shafts, two of which are at least 240 ft. in depth. They are all situated in Exmoor Forest, in the county of Somerset.—Application, stating terms, &c., to be made to Valentine Goold, Esq., Glastonbury, county of Somerset.—Dated August 30, 1858.

TO ALKALI AND SULPHURIC ACID MANUFACTURERS.—The ADVERTISER has had the sole management of a large manufactory for several years, and is competent to PLAN, ERECT, or MANAGE a similar concern of any magnitude, and on the most improved principles, is OPEN to TREAT with manufacturers having works at present in operation, or capitalists about to erect the same, in any part of England or abroad. Highly respectable reference as to ability and character will be given.—Communications may be addressed to "X. Y.," care of Mr. Jas. Newton Warburton, 30, Cumberland-row, Newcastle-on-Tyne.

WANTED, about SEVEN HUNDRED YARDS of SECOND HAND IRON RAILS, either bridge or flat, for ordinary mining purposes. Parties having such rails on hand, and desirous to dispose of them, will find a purchaser by applying to Andrew R. Clarke, Esq., Goldscope Mines, near Keswick.

ROBERT MUSHET'S CAST-STEEL, in ordinary sizes, suited for all ENGINEERING and MINING PURPOSES, will be 3½d. per lb. in future, as it is quite impossible to meet the present demand at 3d. per lb. Terms, nett cash on receipt of invoice. Messrs. John Climas and Son, of Camborne, are now appointed sole agents for the sale of R. Mushet's steel in Devon and Cornwall.—Apply to Robt. Mushet Coleford, near Gloucester.

CHARCOAL PIG-IRON.—THE EAST INDIAN IRON COMPANY, MAKERS and IMPORTERS of PURE CHARCOAL PIG-IRON, from their works in the Madras Presidency, DESIRE to RECOMMEND it to the ATTENTION of ENGINEERS, STEEL MANUFACTURERS, and RAILWAY TYRE and AXLE MAKERS, as well as for every description of MALLEABLE IRON and FOUNDRY WORK, requiring SUPERIOR STRENGTH and QUALITY.—For price, &c., address the secretary, Mr. E. J. Burgess, at the company's offices, 8, Austinfriars, London, E.C.

HENRY CORT.—MEZZOTINTO ENGRAVING of the LATE HENRY CORT, the FATHER of the BRITISH IRON TRADE, and Tubal Cain of our country (see *Times*, July 29, 1856), by an eminent artist, from the ONLY PORTRAIT in EXISTENCE. Published by Mr. Richard Cort, at the *Mining Journal* office, 26, Fleet-street, in AID of the SUPPORT of HIMSELF and SISTERS, for INVENTIONS which are now SAVING MORE than the WHOLE REVENUE of the BRITISH NATION ANNUALLY. Artist's proofs, £1; proofs, 5s.; and prints, 1s. 6d. each. Dedicated to the Iron Trade of Great Britain.

WEST END MINE AND QUARRY OFFICES, 5, WATERLOO PLACE, PALL MALL.

MESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL SURVEYORS, undertake the MANAGEMENT and WORKING OF MINES, QUARRIES, &c., and CONDUCT the LONDON AGENCY of all MINERAL PROPERTIES in their offices with system, economy, and regularity.

Messrs. Brunton and Co. beg to inform proprietors of mines, &c., that the business of these properties is carried on in their office upon the following principles, viz.:—

Accounts systematically and closely made up.
Statements in detail, and clear summaries of finance and expenditure.
Entire and impartial openness of books, reports, and documents, to all shareholders, for perusal or extract.
Immediate communication of any important occurrence to the shareholders.

MINERAL PROPERTIES SURVEYED, and ESTIMATES OF MACHINERY, PLANT, and COSTS OF WORKING FURNISHED.

EAST WHEAL RUSSELL.	WEST PAR CONSOLS.
NORTH WHEAL ROBERT.	WHEAL EDWARD.

MR. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER ENDING 30TH JUNE is NOW READY, and contains (besides the usual Particulars of the Principal Mines, Dividends Paid, &c.) FULL REPORTS on the above MINES, just made by Capt. Chas. Thomas, of Dolcoath; also, a PLAN of the UNDERGROUND WORKINGS of NORTH WHEAL ROBERT.

GREAT WHEAL ALFRED.

The REVIEW also contains a FULL REPORT on this MINE, by Capt. Pope, of Basset, with a PLAN of the UNDERGROUND WORKINGS.

To be obtained at 117, Bishopsgate-street Within, London. Price 1s.

TOLVADDEN MINE.—A SPECIAL REPORT on this MINE, just made by Capt. Pascoe, of South Wheal Frances, APPEARS in Mr. MURCHISON'S REVIEW FOR 30TH JUNE; also, a FULL ACCOUNT of VALE OF TOWY MINE, with a PLAN of the UNDERGROUND WORKINGS.

Now ready, price One Shilling, at 117, Bishopsgate-street Within, London.

THE MIDLAND IRON COMPANY, ROTHERHAM, YORKSHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR LOCOMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS. From the tests to which this iron has been submitted by engineers and railway companies during several years, its superior quality has been generally acknowledged, and can be unhesitatingly affirmed.

Original Correspondence.

SMOKE PREVENTION—Mr. LEE STEVENS.

Sir,—In my last short letter I undertook to prove that as regards economy of fuel, or prevention of smoke, the plan adopted by Mr. Lee Stevens, and called his "invention," was identical with that of the expired patent of 1839, and to the use of which was awarded the premium of 500*l.* at the recent competition at Newcastle.

What, then, is this expired patent which Mr. Stevens at once repudiates and imitates? This enquiry, however, is just what Mr. Stevens and the numerous list of his class of imitator-patentees studiously keep out of sight, while they endeavour to escape the appearance of identity by dwelling on some unimportant and mere mechanical adjunct of their own, which has no effect but to give a colour to the claim for a patent and royalty.

I will first describe and establish the principle and action of the expired patent, and then examine the imitation or piracy which those patentees have adopted. The patent of 1839 is unmistakably described in the words of the specification. Its claim consists in the "use, construction, and application of *perforated air distributors*, by which the atmospheric air is more immediately and intimately blended with the combustible gases in the furnaces." It would appear almost impossible to mistake the nature and effect of these words. A full description of the action and application of the mode of introducing the air in a divided state is there added in the specification, the leading points of which are in the following words:—

1. "The supplying the gas, in the furnace, with the required quantity of atmospheric oxygen necessary to their more perfect union and combustion, and in a manner most favourable to their instantaneous and complete admixture.

2. The supplying the atmospheric air from a source independent of the current in the ash-pit.

3. The separating the two distinct portions of air respectively required for the *volatile* and the *fixed* portions of the coal.

4. The *use, construction, and application of the perforated air distributors*, by which the atmospheric air is more immediately and intimately blended with the combustible gases in the furnace."

Words cannot be more explicit or more explanatory of the purpose to be effected. These are the principles and modes of carrying them out, which have been before the public during 19 years, and so recently and successfully applied at Newcastle, where the judges were in no doubt on the subject, as the following extract from their report so fully confirms:—"Mr. Williams's system, as is well known, consists in the admission of air at the furnace door, or at the bridge, or at both, by *numerous small apertures*, with the intention of diffusing it in streams and jets amongst the gases." In the above description we find no reference or claim, or even allusion, to any particular size or form for the distributor plates. To have made such would only have been unwisely to restrict and limit the use and application of the principle of distribution, but which patent agents are now sufficiently cautious to avoid. Mr. Stevens, however, with his usual, but perverted, ingenuity seeks to evade the proof of identity by referring to a circular, or peculiar form, which he has given to the perforated air distributor, and which he attaches to his "doors or apparatus for regulating the supply of air to furnaces," and then contrasting it with those usually adopted. Mr. Stevens, however, is too clear not to know that it is not the *form* of the plate, but its *numerous perforations* which produced the desired effect of promoting immediate mixture between the air jets and the gases. His policy, however, is to keep silent on that point. Mr. Stevens dwells on some apparent difference in detail between the ordinary practice and the description of the expired patent given in Dr. Ure's *Dictionary of Arts*. Now, to set that at rest, it is only necessary for me to state that the specification was actually revised and corrected by Dr. Ure himself. That so pleased was he with the chemical and mechanical effect of introducing the air in a divided state, and by *numerous perforations*, that he, as my old friend and first instructor while I was a student, volunteered to revise the specification, and to his accuracy and knowledge of the subject is due the very details and descriptions which Mr. Stevens would torture into discrepancy and antagonism.

The expired patent, it will now be seen, was not for the use of any particular description of material, whether of iron or fire-clay, or for any peculiar size, shape, or description of perforated air distributor; or whether it was to be flat, curved, circular, spherical, eleptical, polygonal, or any other shape to give Mr. Stevens a ground for objection: it was the use and application of *perforated air distributors*, without reference to material or form. This is so clearly put by Dr. Ure that I here quote from his letter which was given in the appendix to the second edition of the *Treatise*. Writing in 1840, he says—"In the case of great steam-boilers, for which your patent is especially intended, since these are fed at short intervals, your plan of distributing atmospheric air in a regulated quantity, *by numerous jets*, through the body of gasiform matter, is peculiarly happy, and must enable you to extract the whole heat which the combustible is capable of affording." Do we find here any limitation as to size, shape, or material in reference to the perforated distributors? Again, "your atomic representations are quite correct, and will please all those who delight in tracing the workings of nature into its formerly mysterious and inaccessible sanctuary. You will remember when, about ten months ago, you laid before me the first draught of the specification of your patent furnace, with what delight I hailed the invention as the harbinger of a brighter day for steam navigation, where economy of fuel has become the *sine qua non* in regard to long voyages." Again he observes—"I am more particularly pleased with your analysis of the combustion of the gases and vapours given out by hydrogenous coal, commonly, though incorrectly, called bituminous, for it contains no ready-formed bitumen, but merely its elements—carbon, hydrogen, and oxygen."

Many years after, when preparing the new edition of his *Dictionary of Arts*, under the head of "smoke prevention," he refers to this patent now under consideration, the specification of which he had himself revised. After describing the "specific invention," he adds—"The operation of air entering in small jets into the half-burned hydro-carburetted gases *over the fires*, and in the first flue, is their perfect oxygination, the development of all the heat which that can produce, and the entire prevention of smoke. *One of the many* ingenious methods in which Mr. Williams has carried out the principles of what he *justly calls his Argand furnace* is represented at Fig. 1310," which is there given, with the following remarks:—"The front base is perforated with round or oblong orifices. The fire-door *may have* its fire-brick lining also perforated." It is here worth observing, as Mr. Stevens has noticed it, that the *fire-brick* lining which Dr. Ure says "may have" its perforations must have suggested itself to him from what he had himself seen in London. It was never my custom to have fire-brick in the doors, seeing how much room they occupied. I am, however, aware that in land boilers in Manchester and other towns, where there is room enough, the perforated distributors are frequently made of fire-bricks or tiles, and with excellent effect.

The "specific invention" then did not, we see, consist in the use of any shape, size, or form of perforated plates. The feature which so decidedly met the approbation of Dr. Ure was the use of the *perforated distributors* and the *admission of the air in divided portions or jets*, the effect of which he so clearly describes. Words, then, cannot be more explicit or less open to doubt than those of the specification above described of the patent of 1839, and see how unmistakably they are adopted by men of high standing and authority. Dr. Ure describes it as "the distributing atmospheric air in a regulated quantity, by which," &c. Sir Robert Kane says—"The diffusion of the air is secured by its issuing from a great number of small jets, and the consequent full combustion of the gases." Dr. Brett says—"By causing the air to be driven by jets among the inflammable gases you employ the only means practicable, in operations on a large scale, of causing a sufficient admixture between the air and the gases to be burnt." Prof. Brande says—"You admit a number of jets of air into a heated, inflammable atmosphere, and so attain its combustion." These instances of what men of high authority considered the patent to be might be multiplied. Enough has been said to prove that all considered it to be the "use and application of perforated air distributors," and not the size and shape of the distributor plates.

And now as to Mr. Stevens's adoption of these "perforated air distributors." Discarding all his other plans of "calorific plates," &c., in 1856 he took out two patents, the important and useful feature in which is the use of these very perforated plates. In the first, sealed Jan. 25, 1856, his specification says—"In the front of the igniting chamber is an opening, which is covered by a double door or cover, provided with *numerous holes* or passages, through which *numerous streams of air pass to the igniting chamber, and mix with the products of combustion* before they pass to or through the tubes."

Again, "h, h, h, are *perforated doors for the admission of air.*"

In his second patent, sealed but six months after, July 29, 1856, the specification states—"This invention consits of combining apparatus for the admission of atmospheric air at the *back* of steam-boilers by *perforated doors*." Having already said enough in proof of identity, I propose, with your permission, completing my remarks in your next Journal.

Liverpool, Aug. 30. ——— Chas. Wye Williams.

FURNACE DOORS, &c.

Sir,—I understand, by Mr. C. W. Williams's letter of last week, that he will at once proceed with his efforts to "fully establish" the "identity" of what I have in very plain terms, and with some anticipatory evidence, denied the existence. His character being incidentally at stake, he will, I dare say, put forth his utmost disputative strength.

His preliminary mistake of about ten years in the date of his first patent for smoke prevention being established by the unavoidable admission of Mr. Williams (a sufficing admission, and yet not free from error), there remains for his immediate elucidation my propositions 3, 4, and 5, under date of Aug. 18.

With further reference to his epistle of last week, I must emphatically declare that I did *not* know "there was no patent in 1828." If he repeats the assertion I will trouble you with proof to the contrary. It is not my habit to trifle with the truth, as he does. I should be sorry to be such a careless and reckless writer as he is; and he ought only to charge me with folly for my *bonâ fide* belief in the existence of a document which he made the very foundation of his statements.

I have merely to refer to your own columns to show that it was not myself, but Mr. Williams, who has "deliberately raised the question," and that, too, with the unchanging wantonness which leads him to assail whoever may presume to dissent from his *dicta;* yet I am not the less resolved to pursue the subject to its reasonable limits. So that, when we have exhausted all that is included in his present attack upon my property and social position, and what I have already advanced and may still have to adduce in reply, he will find me ready to join issue with him, in regular sequence, upon what he triumphantly fancies I wish to evade,—namely, the *superiority* of my invention over the means to which he lays claim; and to furnish him with some practical facts about "hot air," which may induce him to concoct a new chapter for his *Treatise, &c.*

It is not considerate in Mr. Williams to find fault with my style. He should make allowance, not for the imposing preponderance of his own natural genius alone, but for the unapproachable excellence of his literary acquirements. Mine was but a common education, which terminated before I was fourteen; his must have been of longer duration, and of a much higher standard, to warrant his assuming the *status* of a gentleman learned in the law. Nevertheless he is welcome to all the advantage he may seek in describing what I write as "wordy and irrelevant communications," whilst I remind him that nothing is more irrelevant than that which does violence to veracity. Last week (another inevitable illustration) he attempted to make your readers suppose that I am a "smoke-burning patentee," although, in Feb., 1854, in reply to a similar misstatement, I defied him to produce the slightest evidence to sustain that gratuitous assumption. I renew that defiance now, after a lapse of four years and a half.

Repeated and prolonged experience of Mr. Williams precludes my expecting that he will retract anything he has once asserted. It is not in the nature of a confirmed dogmatist to do so. Yet persistance in that course, whenever he seeks to make me the victim, he may rely on it shall always be followed by unsparing exposure. J. Lee Stevens.

1, *Fish-street-hill, Aug.* 30. ———

FURNACE DOORS.

Sir,—My attention has been called to a long letter from Mr. John Lee Stevens, in your Journal of Aug. 21, in which he claims priority of invention in respect to his perforated furnace-doors, and adduces in evidence the patent of Mr. Charles Wye Williams of 1839, from which he quotes largely to show its dissimilarity, as he conceives.

Now, Mr. Stevens had no patent of that period, if we except one in 1841 for candlesticks and candleholders, and his first patent for improvements in furnaces dates no earlier than 1852, the very year before Mr. Williams's patent expired, and while it yet enjoyed a world-wide fame. When Mr. Stevens took out *that* patent was he entirely ignorant of what I and others had done in the erection of Mr. C. W. Williams's Argand furnaces in England, Scotland, and Ireland? Perhaps he was, and I may charitably assume that he never saw an Argand furnace until *after* his patent of 1852, which patent contained nothing in relation to his present pretended invention. But I may again assume (adopting his own style) that, being a furnace patentee, he could not go far without arriving at the startling fact that Mr. Williams's agents, and particularly myself, had applied the principle of Mr. Williams's patent to meet various contingencies, in a variety of ways, without, however, deviating from the specific character of the patent itself. Among the rest he would find that furnace-doors were cased and perforated in a particular way, serving to carry out the Argand principle of distributing the air to the gas, but which he, unwisely, had never contemplated in his patent of 1852. Thus enlightened, we find Mr. Stevens afterwards taking out a supplementary patent for the doors he had omitted to improve in 1852. The Argand furnace-doors were cased and perforated, and were used either open or regulated. What does Mr. Stevens do? He tells us—"My invention specially provides that the inner plate of the door shall have a curved, and *not* a plane or flat surface."

In common fairness to Mr. Williams, and those agents who up to 1853 carried out his plans, I beg to submit an engraving from a lithograph, executed by Mr. Cheffins in 1842, showing details of the ventilated doors of Argand furnaces, of which some thousands were cast, sold, and erected throughout the United Kingdom. You will observe Mr. Stevens's very remarkable improvement in this plan. I made the doors with "the inner plate of the door," with "a plane or flat surface." Mr. Stevens "specially provides that the inner plate shall be curved," shall be "convex," shall be "semi-globular," shall be "domes." Is Mr. Stevens really serious in pronouncing this bellying or bridging of the face of the perforated box behind the door any invention at all? It is true he has patented it, and hence we may again assume as a reply that he really does look upon it as something higher than a matter to be only secured under the provisions of the Registration of Designs Act. But it is in every sense a design, and nothing but a design, but whether ornamental or useful I very much doubt.

Mr. Williams had no patent in 1828, and the substitution of that date for 1839 must have been an error of the pen or the press. Mr. Stevens has every right to patent and puff his inverted perforated bowls or colanders, but he should not do so at the expense of a worthy predecessor, and in the face of abundant facts. Henry Dircks, Engineer.

32, *Moorgate-street, City, Aug.* 27.

P.S.—Since writing the above, I have read Mr. Stevens's verbose and very ponderous epistle of Aug. 23. Much as I admire a man's using the "spectacles of books" with a view to enlighten his mind, I cannot but condemn his limiting his vision, as Mr. Stevens does, by referring to treatises, dictionaries, and specifications, as if these, and these alone, settled a matter of original invention. For the last 16 years I have had furnace doors being constantly constructed with *flat* perforated boxed backs and perforated doors. I yield, however, to Mr. J. Lee Stevens the high merit of not copying these *flat* perforated boxes exactly to the extent of making his *flat;* Mr. Stevens's perforated door backs are *semi-globular*, and for all the merit appertaining thereto he alone is justly entitled. The making a thing "semi-globular" that had always previously been made "flat" may well call forth Mr. Stevens's utmost literary efforts to establish a claim so peculiarly brilliant!—H. D.

*** We have received the engraving above described, and dated 1842.—Ed. *M. J.*

"BREAD FROM COAL"—"BREAD FROM SEWAGE."

Sir,—Some two years ago it was "iron manufactured without fuel," the coal was for ever to lie dormant in the ground, to the great consternation of colliers and colliery proprietors. But now it is "*Bread from Coal.*" We shall see on the pits' banks flags flying, cannons roaring, and the whole world will be going mad after collieries and colliers' work. What is the use of gold mines and diggings? we cannot eat that. But here is every luxury in coal. The writer of the paper in last week's Journal, however, seems to hint it possible this great revelation may not be brought about in our day. I, therefore, beg to advance the more startling announcement—"*Bread from Sewage;*" and that every element that is required for bread, meat, vegetables, &c., is found in it. And that while Prof. Frankland is preparing his process, I submit that this be brought into the great laboratory of Nature in our own country, which will soon turn it into bread, and abundance of it. Here is a worse than worthless refuse; but coal we should have to get. Ah! but the difficulty. In all things there are difficulties. And, as I wrote to Yorkshire on the subject, I submit that receivers be contracted for to receive all sewage; that an engine or engines be erected to pump water, and dilute it with water and a little lime—the lime would liberate a portion of the ammonia, which would ascend over the city, and come down in showers of health and vigour to man, beast, and vegetables; that cupolas be erected over these receivers, 200 ft. high, in order that the gases should ascend sufficiently high to spread over the whole city or town; that railways pass under these receivers; that the liquid be sent into the country in every direction; and that every gentleman who wishes well to London and the country direct his servants to give it a fair trial, and I venture to say no more guano will be wanted from abroad. With twenty millions sterling we should have more produce throughout the country, provided all large towns took up the subject.

Now, Sir, I have a piece of land upon which I have made experiments for six years. It has had no manure but diluted sewage with a little lime riddlings for six years, and part of it bearing the same kind of crop every year. I will back it against any land of the same kind for quantity and quality in the country,—viz., any land of the kind that has had the same kind of crop for six successive years. In 200 years Prof. Frankland's process will have time to appear, when the living will have nothing to do but get coal, turn it into bread, and eat it. Thos. Jones,

Churchbridge, Aug. 31. Forge and Mill Manager.

P.S. By-the-bye, we have been reckoning without our host. What are we to do when the colliers strike?

AMALGAMATING MACHINERY.

Sir,—In your Journal of August 28, I find a communication from Mr. Jones, on "Gold Amalgamating Machinery." Mr. Jones cannot have read your notice in the Journal of Aug. 21, or my pamphlet correctly, or must have grievously misunderstood my meaning. I will endeavour, however, to explain the matter to him, but I must once for all let it be understood that I do not intend to enter into a paper warfare, or to take notice of any other communications of the character of that of Aug. 28, but to allow my pamphlet to explain my meaning, and the machinery to stand or fall on its own merits.

Mr. Jones objects to the use of so large a quantity of mercury, and states it is so much money lying idle. This is far from the fact. I have shown in my pamphlet that a large quantity of mercury is necessary, and have given the reason why; and in lieu of lying idle, it is employed in separating the gold from the ore it is in contact with. By a parity of reasoning, the capital employed in the erection of a steam-engine is idle, whilst the engine is doing its duty.

Mr. Jones objects to the mercury "sickening," and states, "that if the grinder were charged with ore," &c. If Mr. Jones reads my pamphlet, he will find that I have made provision against such an occurrence by a previous treatment of the class of ores that would produce such an effect.

Again, Mr. Jones states "that Mr. Mitchell shows in his pamphlet that a certain ore yields about 1½ oz. of gold to the ton, and that no gold is left in the tailings; and yet that he can obtain upwards of 3½ ozs. of gold to the ton from the same ore," &c.

My answer to the above is, that I never stated anything of the kind. If Mr. Jones will refer to my pamphlet, he will find that, after mentioning the process of obtaining gold by washing, I state "I have treated tailings that have been obtained in the ordinary way in Australia and elsewhere, and from which all the gold available by such process had been extracted, and I have been enabled to collect at the rate of 1½ oz. to 3½ ozs. of gold per ton, by means of my amalgamating machinery;" and not that I could obtain 3½ ozs. of gold from any substance, tailings or otherwise, containing but 1½ oz. Such a statement is so absurd that it at once avows its own contradiction.

Finally, I must caution Mr. Jones to beware how he either directly, indirectly, or inferentially, couples with my name the term "humbug." No professional man of any reputation could allow such a statement to be made without having the slander legally redressed. If such a juxta-position should again occur, I shall at once take legal proceedings against the party in the matter.—*Sept.* 2. ——— John Mitchell.

MANUFACTURE OF STEEL.

Sir,—In your Journal of Aug. 28, I find that one of your correspondents has made some statements which are not true, and which I beg to correct in your next impression. My patent for making refined metal was taken out long before Mr. Binks read his paper on Steel before the Society of Arts; its object was *solely* to improve the manufacture of *iron*, and had no reference to that of steel. The refined metal is now manufactured and can be supplied in any quantity by direct application to myself.

I have *no patent*, and *I never had one*, for the manufacture of steel. My experience has taught me that the present mode of manufacturing cast-steel cannot be materially improved, and this opinion I have publicly expressed more than once.

The sample of refined metal was shown at the Society of Arts as an *iron-making* material. I believe there was only one steel manufacturer present at the meeting held in May last, and I beg to assert that he made no such observations as those your correspondent states.

As I have taken *no part*, and, indeed, have *no process*, patented or not, for "revolutionising" the manufacture of steel, and as my opinion is decidedly adverse to the many processes which have been suggested during the past three years, I feel at a loss to know from what motives your correspondent has ventured to make the extraordinary statements which he has done. It would have been more candid and consistent with plain dealing if he had given his name. Charles Sanderson.

Sheffield, Aug. 31. ———

MANUFACTURE OF PIG-IRON.

Sir,—The object the Welsh furnace manager gains by using a few pounds of coal beneath blast stoves is to ensure the ignition of the furnace gases entering the stoves after a stoppage, thereby preventing explosions.

I intended to recommend Mr. Barr to visit Wales, to see the small coal washed; but it is unnecessary that he should go so far from home to see that simple and good process; let him look around in the neighbourhood from which he writes, and he will see it carried on extensively in the county of Durham, where I belive it was first introduced into England. I have in my possession a sample of Durham coke made from the small washed coal, and good it really is. This coke is used to smelt the Cleveland ironstone. It is evident that Mr. Barr is not only ignorant of what is taking place in Wales, but in his own neighbourhood also.

Mr. Barr informs us that "there is only two qualities of iron in commerce; the first of these is iron of a good and sound nature, suitable for a number of purposes where softness, toughness, and fibrousness are wanted." Now, it is actually necessary that an iron of the above quality should be almost entirely free from the metalloids and carbon; and the greater the quantity of metalloids and carbon in the above description of iron the more inferior the quality. Further on, Mr. Barr states—"If there be not sufficient carbon in the iron the sulphur is not reduced." Does he mean reduction by converting it into a sulphuret of carbon, or, perhaps, sulphurous acid? The 4 per cent. of sulphur Mr. Barr alludes to in the common Welsh iron is entirely visionary. Where does the 4 per cent. of sulphur come from? The average of sulphur in the Welsh coals, according to the third official report on the coals suited to the steam navy, is 1·6 per cent. The average sulphur in the Welsh ironstone is 0·2 per cent.; and suppose the whole of this sulphur to unite with the cast-iron, which is not the case, dismissing odd weights, will give the following per cent. of sulphur in the iron:—1 ton 4 cwts. of coal, containing 1·6 per centage of sulphur, the whole of which is supposed to pass into combination with the iron, will give an iron containg 2 per cent. of sulphur; 3 tons of ironstone, containing 0·2 per cent. of sulphur, the whole of which is supposed to pass into combination with the iron, will give an iron containing 0·6 per cent.: total per cent. of sulphur in the iron, 2·6.

The percentage of metalloids in foundry iron is, as stated in my previous letter, greater than in forge iron; the carbon will be about the same in both. In support of this fact, I find in Gmelin's *Chemistry* the average in 12 samples of foundry iron—carbon, 2·87; silicium, 1·84. The average in five samples of mottle and white—carbon, 2·97; silicium, 0·45. Dr. Ure's *Dictionary* give analyses of iron that show the same results.

There are other statements in Mr. Barr's letter requiring correction, such as the inferior quality of iron produced at the present time at Carron and Lowmoor, the time erecting the first furnace in Wales, the number of furnaces in Cleveland, the time in their erection, &c.; but as those subjects are not under discussion I must dismiss them.

Before Mr. Barr undertakes to teach and correct men of long standing experience, such as he attacks in the Welsh works, he should first learn at least some of the leading principles, not write that No. 1 iron is the superior quality to make the best wrought-iron; and, before he brings the cudgels of chemistry to support his opinions, which go in direct opposition to his hypothetical nonsense, he should first study the laws of chemistry,

for which I recommend him to commence with W. H. Balmain's *Lessons on Chemistry, for the use of Pupils in Schools*, and he will then learn to write no longer about the reduction of sulphur by carbon.

Newport, Aug. 31. DAVID JONES.

WILDBERG GREAT CONSOLIDATED MINING COMPANY.

SIR,—In the account of the general meeting of the proprietors, held in London Aug. 23, which appears in your last Journal, the Chairman is reported to have said—"It appeared from the accounts that the value of the ores returned from the mines, before Messrs. Phillips and Darlington took the management, in three years, ending June, 1857, amounted to a fraction under 10,000*l.*, whilst the amount returned by them during the last year was upwards of 14,000*l.*; and that did not tell the whole tale, because the first month Messrs. Phillips and Darlington had the management there were scarcely any returns." I will not trouble myself to seek motives for the Chairman's evident desire to depreciate my management, and to exhalt that of Messrs. Phillips and Darlington at my expense; he has betrayed such an entire unacquaintance with the facts of the case, that I imagine he will be somewhat surprised at the picture which I shall presently present for his consideration, and the materials for which are all to be found in the printed annual statements issued to the shareholders. I have sufficient confidence in the honourable sentiments of the Chairman to believe that when he is master of the subject I shall be amply avenged by the regret which he will experience at having permitted himself to give circulation to statements so devoid of foundation.

Why, the honourable Chairman breaks down at his very first "fact;" instead of the returns for the three years ending June, 1857, being only a fraction under 10,000*l.*, as stated by him, they amounted, according to the published annual reports for 1855, 1856, and 1857, to 16,538*l.*, and with sundry omissions, of which I have not the precise figures, approached 17,000*l.*

The Chairman is also reported to have said, "that did not tell the whole tale, because the first month Messrs. Phillips and Darlington had the management there were scarcely any returns;" and the Chairman was right, he did not "tell the whole tale," or he would have told the meeting that in the month of June, 1857, when those gentlemen commenced their management, a great number of men were discharged from underground, by order of the council, and that in consequence very little ore could be broken. That the small returns for that month were not owing to any want of available ore in the mines when Messrs. Phillips and Darlington took the management is certain, because in their published report to the council, dated June 22, 1857, just eighteen days after they had commenced their administration, they say—"These mines are at the *present moment* capable of affording a monthly return of, say, 110 tons silver-lead ore, producing 50 tons of work lead, worth on an average 30*l.* per ton=1500*l.* We think the monthly costs may be reduced to 1350*l.*, leaving a surplus profit of 150*l.* per month, or 1800*l.* per annum." And that statement was considerably below the truth, as is abundantly proved by the results of the year ending June 30, 1858, as reported to the meeting Aug. 23; for Messrs. Phillip and Darlington show that the returns for the year, being the first year of their management, amounted to 1730 tons, or 144 tons per month, realising a profit of 2016*l.*, which would have been 6446*l.* had the price of lead, and the average yield of silver from the ores remained as they were when Messrs. Phillips and Darlington entered upon the management.

It is certain that when I retired the mines had been brought by me into a position to make a profit upon the year ending June, 1858 (for I am entitled to take credit for the price of lead, and the richness of the ores in silver, as they stood at the date of my retirement), equivalent to nearly 11 per cent. upon the whole amount of 58,730*l.*, which is the entire debenture and subscribed capital of the company in excess of the purchase price. I am enabled to show, by comparing the state of the mines as set forth in my published valedictory report of June 15, 1857, with the results reported by Messrs. Phillips and Darlington, to the end of June, 1858, that they are in no way entitled to credit as discoverers, and can alone claim to have been faithful workers; for the quantities of ore which could be raised per month, and the period when improvement might be expected, were published in my report at the very commencement of Messrs. Phillips and Darlington's operations.

Extracts from Mr. Dean's valedictory report, dated June 15, 1857. Mr. Dean retired from the management June 5, 1857:

"Notwithstanding all the difficulties encountered, the mines have been brought into a state which would yield at the present time 150 or 160 tons of 50 per cent. ore per month; but, unhappily, the present supply of labour is not sufficient," &c.

"It is however satisfactory to add that, after supplying the leading works, enough labour has been secured to produce at the present time about 125 or 130 tons of ore per month upon an average, worth (say) 1200*l.*; and from the completion of various necessary works, the working cost may be reduced to about 1200*l.* per month; therefore the mines may now be considered as more than self-supporting."

"I cannot see the possibility of increasing the labour power for some considerable time to come, therefore the only course for the present will be to push on the leading works now in hand as fast as possible, and in the course of five or six months they will afford facilities for attacking the rich ore ground which we know to be in store, and the returns and profits will thereby be greatly increased, without any considerable addition to the working cost. There is no doubt upon this point; we know where the ore is to be found, and the distances to be passed through to reach it."

Extracts and condensations from Messrs. Phillips and Darlington's and the council's reports, read at general meeting held Aug. 23, 1858:—

"The average monthly quantity returned for the year ending June 30, 1858, exclusive of July, 1857, was 150 tons, which has enabled us to make a small amount of profit."

"During the first seven months, commencing July, 1857, to end of Jan., 1858, the returns averaged 119½ tons per month, or, deducting July, 127½ tons per month. (See page 6 of report.) The value of the ores produced during the year ending June 30, 1858, exclusive of ores purchased, amounted to about 1505*l.* per month, whilst the average working and smelting costs were 1266*l.* per month. The profit would have been considerably greater had the price of lead, and the yield of silver per ton, been maintained to the average of 1857.

"Since that period (June 29, 1857), a communication has been made at the adit level, between Carter's shaft and the rich course of ore in the Dornergang." After that communication was made, the average returns increased during the five subsequent months ending June, 1858, to 178 tons per month.

The directors say "that improvement has been entirely due to the last six months."

Messrs. Phillips and Darlington say, "We therefore believe that we are safe in estimating the monthly returns for next year at 200 tons of 50 per cent. ore."

I think I have now adduced sufficient evidence to show that the large return of ore made during the last year was in no way due to any discoveries made by Messrs. Phillips and Darlington; indeed, if we turn to their last report, we find but very scanty mention made of any new discoveries, and nearly all those indications are too recent to have had any sensible effect upon the returns, and even those recorded are merely the cutting before the position of which was previously known. I am aware that Messrs. Phillips and Darlington have not directed their attention to the making of fresh discoveries during the past year, because they considered that so many were already made, and which were liable because convenient access could not be obtained to them; that the most prudent course was to continue the works commenced, and advanced to a certain state of completion by me; which should enable them, before the end of the present financial year, to raise the monthly returns to something like 300 tons.

I have been very averse to draw the names of Messrs. Phillips and Darlington into this discussion, because I am sure they would repudiate the spurious credit offered for their acceptance; but should those gentlemen think I have been at all unjust to them, I shall be happy to discuss their claims from June 1, 1857, with them in the *Mining Journal*.—*Cologne, Sept.* 1. ARTHUR DEAN.

EXTRACTION OF GOLD FROM GOLD-BEARING QUARTZ.

SIR,—Permit me to say that I am getting rewarded for all my troubles, which have not been slight in these matters, since the year 1850. But it may now be admitted that a good time is coming; for after the meeting, held this day, at the Quartz Reduction Company's office, there can be little doubt Mr. Squire's process of fixing the gold in the quartz that bears it has shown most clearly, and as a proof that what he adds to the said quartz by way of preparation before calcining so surely brings it into the massive state that the ore evaporates with the fumes of arsenic or sulphur, as is usual in the ordinary way of calcination in heaps or kilns, will be apparent on examining the assay results given below. The loss hitherto in California has always been considered as 50 per cent. between the *raw* and *calcined* ore produce, from which cause the calcination was abandoned. Mr. Squire begins with the system I proposed in 1854—to hand-pick or select the ore; then subject it to a preparation known only to himself, after which he calcines in kilns. He says after process (he says) is amalgamation, but how done he does not state, but proposes no new machinery, and the costs of the material he uses he states as being covered by 5*s.* per cwt. in England.

The experiment was conducted very fairly thus wise, from several tons of gold-bearing quartz brought to England by the late unfortunate Mr. Cathawood, which has been discovered to exist at the Crystal Palace. Mr. Johnson, of Basinghall-street, as assayer, went with Mr. Squire to chose from the said lot of gold-bearing quartz, more or less, 5 lbs. in weight, according to Mr. Squire's views of selection. The 80 lbs. were then divided by these gentlemen, each taking his lot to operate upon according to his craft.

That taken by Mr. Johnson produced per fire assay, after parting, 3 ozs. 14 dwts. fine gold per ton.

That taken by Mr. Squire, and subjected to his process, and then calcined, produced on the average of five samples that Mr. Squire had divided his portion into, an average of 7 ozs. 1 dwt. 9 grs. per ton.—[*Note.*—Mr. Squire retained unground of the sample of 5 lbs. several stones, more prominently to show the effect of his process by the innumerable globules of gold thereon.]

Thus far it shows that no gold of great commercial value has evaporated, which is satisfactory, and is a great point gained; and the corresponding of the assays shows that it has been fairly done, and no "brick-dipping aid" called into requisition, as was thrown out as possible at the meeting held at the London Tavern in July.

The point that remains to be cleared up is this,—practical amalgamators know that from 50 to 90 per cent. of gold is lost by any of the present methods in use in all countries, and to prevent this has baffled every practical man as yet. What will be lost by Mr. Squire's mill-work, when operating on the gold-bearing quartz, after Mr. Squire's process has been applied to it, was elicited from him after some hesitation. He considered that 10 per cent. would be a large loss. This would appear strong language, but I will say that, although I consider it quite unlikely in a stamps mill, I do not do so if he were to use Mr. Thorne's mill and amalgamator, which is in use at Ranelegh-road, Thames-bank, Pimlico, which has been successful in extracting gold from gold-bearing quartz brought from California by Mr. O'Conner—123¾ tons of which gave 32 ozs. 15 dwts. 12 grs. of fine gold, or 2 ozs. 11 dwts. 10½ grs. per ton. There was no assay made of the ore previous to amalgamation, because that does not seem to have been hitherto the custom in England, except with some knowing copper smelters, who are reaping a rich harvest by their knowledge of the virtue of assaying, and even analysing all ores that come to their works; operators for these purposes are scarce, as will be owned by some of the smelters at Swansea, who have tried to follow the example set by the Messrs. Vivian in these matters.

To follow up Mr. Squire's plan, assayers must be in requisition, and I never saw but one other white man who had the perfect vision for selection of gold-bearing quartz in my long practical metallurgical life. The person I allude to is Mr. John F. Johnson, one of the owners of the mining setts held under the Merced Mining Company by the Nouveau Monde, whom it was my intention to have induced to undertake the management of the selection department under the company, had I been seconded in my efforts to establish it.

I firmly believe, if Mr. Squire is propperly supported, and the Quartz Reduction Company appear to have every inclination to assist him, he will succeed, although there will be some difficulties to overcome, which will principally consist in the selection of the quartz before being operated upon. Let us make a debtor and creditor account of the matter: say 100 tons of ore are operated upon under the present system, and their cost is ..... 8*l.*, or 12*s.* 4½*d.* for mining charges per ton.
5*l.*, or 12*s.* 4½*d.* for amalgamators per ton.

Total costs ..... 16*l.*, or 24*s.* 9*d.*

The produce at present is ½ oz., at 4*l.* per oz. .. 40*s.* 0*d.* = 15*s.* 8*d.* profits per ton.

[*Note.*—This only got when the Quartz Reduction Company get sufficient ore.]

No account can be given showing the per cent. loss of gold, from the fact that the Quartz Reduction Company are kept in ignorance of this by their engineer.

Mr. Squire's 100 tons would show thus:—63 per ton for mining costs .... 12*s.* 4½*d.*
Deduct 25 per cent. for his rejected part, according to his views, leaves 1500 lbs. out of 2000 lbs. (the Californian ton) to be operated by amalgamation, or say one-quarter less than 12*s.* 4½*d.* (3*s.* 1*d.*) ..... 9*s.* 3½*d.*

Costs ..... 21*s.* 8*d.*
Add costs of selection per ton, 60 c., or ..... 2*s.* 5½*d.*
Fuel for calcination, and material added 7*d.* per cent. × seven times for Californian costs ..... 4*s.* 1*d.* = 6*s.* 6½*d.*

Total costs ..... 28*s.* 2½*d.*

In Mr. Squire's case we take the assay content as per the assayer's (Mr. Johnson) showing—3 ozs. 14 dwts., less the 10 per cent. Mr. Squire proposes as loss, the gold value of balance will be found to be no less a sum than £13 6 4
From which must be deducted ..... 1 8 2½ for costs,

Shows balance ..... £11 18 1½ as profit per ton.

This shows well for Mr. Squire's process, and I will leave it to some of your correspondents to show where any error is observable, beyond the amalgamation proof that I admit is still wanting.—*Kensington, Aug.* 31. JOHN H. CLEMENT.

[It was mooted after the meeting whether it would not be a wise plan to obtain 1 ton of the same quartz as had been obtained from the Crystal Palace, and that after the whole ton had been spalled to the size of road metal Mr. Johnson, as assayer, should take what he might consider a fair sample and assay it, to obtain the exact gold content, and that then Mr. Squire should operate upon the ton on his principle at some works on the Thames. Mr. Clement considered that there was only one place in London where such operation could be carried on, which belonged to Mr. Thorn, in the Ranelagh-road, Pimlico, close to the large building works of Messrs. Cubitt, Thames-bank. These works are easy of access from the City per the Chelsea steam-boats, which land passengers only 500 yards from the gold and silver works.]

THE REAL DEL MONTE MINING COMPANY.

SIR,—A duty which should be performed by any and everyone for the benefit of the public, in exposing the fallacious side of any scheme which may be got up to draw capitalists into a speculation where great advantages may be held out, is but too rarely performed. Hence the reason why I communicate to you facts within my knowledge, and for which I vouch, touching the scheme about to be, or, perhaps, ere this reaches you may have already been, placed before the English public. Considering that a hint to prevent any risk in investment which might result unhappily to the unwary will readily meet with publication in your valuable columns, and being positive of the truth of the remarks I may make, no further preliminary observations are necessary to claim their insertion in your Journal.

A prospectus has been forwarded to London, for the purpose of putting into the mining market the mining negociation belonging to a Mexican company, the title of which in past years was well known to your readers, and by some may be remembered with regret—the Real del Monte Mining Company. This prospectus has for its object the subdivision of the 205 shares into which it is now divided into 6150ths, at $1000, or 200*l.* each, in order to realise at $6,150,000, or more than 1,000,000*l.* sterling, the plant which was purchased about ten years since for less than 30,000*l.*, from the old (English) Real del Monte Company!

The existing Real del Monte negociation is undoubtedly a very valuable one, and great credit is due to the present adventurers for undertaking this great enterprise, and in embarking their capital in 1849 to place the concern on a firm basis; and more especially to Mr. Buchan, the former director, and the enlightened practical Cornish miners and mechanics under his command, all possessing the advantage of many years' experience in this republic, for the skilful and economical management of the outlay, which reached nearly 200,000*l.* It is not my object to treat of the present value of the property offered, or to be offered, to the public; of the many improvements it has undergone since it was handed over by the former adventurers; of the lucrative discoveries since made; or of the important acquisitions added thereto; but simply to state that the legal right to possess the property has long since been questioned, which for several years has been, and still is, in litigation, the plaintiffs being the heirs of Count Regla, the original owner of the Real del Monte Mines, whereby it is not impossible that it may be decided that the majority of the mines and silver reduction works now occupied and enjoyed by the company are not legally possessed by them, and of which they may soon be deprived, and have to return them to their owners. The cause of the lawsuit arises out of the fact of the old English company having disposed of their interest in the mines to the present one without previously giving the right of *the refusal* of the purchase to the owners, which should have been done according to the Mexican mining laws.

Other and heavy lawsuits are pending against this company, respecting their legal rights to various mines, which occupy the attention of the Mexican tribunals, and to one mine in particular (the Rosario) a claim has recently been made by a countryman of ours, in consequence of its forfeiture (in accordance with said statutes) by the present company, the nature of which has been forwarded to the English Government for consideration, justice having been denied him in this country.

In stating these facts, the English public will decide for themselves if it be safe to invest in a property of this description, however good it may be in a lucrative point of view, but of which they might be deprived almost as soon as they part with their cash, or before they would have the pleasure of enjoying the sweets of the first cherry; and, moreover, they would purchase the lawsuits, and make themselves responsible for the costs and damages in which the present company may be condemned.

I would not for a moment attempt to deteriorate the important and certain advantages to be derived from silver mining in this country, as I should expose myself to endless refutations, and I am convinced that in this great mining field innumerable legitimate speculations, which will become a source of immense wealth to foreign speculators, are ready to burst forth, and will ere long call their attention, as soon as this unfortunate revolutionary country comes again into a peaceful state.

If capitalists in London purchase shares in the present Real del Monte negociation, and hereafter "find their fingers burnt," they will not have the consolation of saying they were deceived after receiving this, I trust, timely warning.

Mexico, July 31. VOX ANGLICA IN MEXICO.

GREAT WHEAL VOR UNITED MINES.

SIR,—In your last Journal I notice the letter signed Matthew Loam (jun. ?), for Hocking and Loam, engineers, on the subject of the substitution of wooden for iron rods in the above mines. This, in the estimation of most people, carries with it the appearance of giving up the advantages derived from iron roads over those we could only avail ourselves of in the "good old time" of McAdam. Mr. Loam is welcome to all the credit attaching to the first paragraph of his letter, in which he hints at people writing on subjects about which they know nothing.

The fact is, this is a question easily solved, and is mainly dependent on two points—viz., efficiency and economy. That iron is stronger than wood few people can doubt, where it can be used with advantage; and the only question is, if there is any cause that would injure its character, such as crystallisation, or oxidation of acids (the latter would prevent its adoption in many mines). I have already proved that there cannot be sufficient concussion as to produce crystallisation; and Mr. Loam has done all he can to prove that it has been sheer weight that has broken them,—and this could only have occurred by their not bearing an even strain,—and he very naturally enquires if any other rods could have borne the same load? There is no visible oxidation in these rods from acids. As I stated in my former letter, it is their faulty connections that has caused the breakages; and I repeat again most unequivocally that they do not bear an even strain. The principle of the alteration I proposed in them (which is not disputed by Mr. Loam) is not a new one, but as old as any mechanical use was ever made of iron. Those who are in the country can see it in almost every railway bridge crossing a parish road; and those in town may see it more fully exemplified in Hungerford Bridge; and, as I have stated, it has been in use most successfully at Par Consols Mine for upwards of 13 years.

If there is the slightest supposition that there might be an imperceptible breakage in either of the plates (rods), it can easily be discovered by proving them during my proposed alteration. Thus much for their efficiency.

Now for the question of economy. By the mode which I suggest, the expense will be confined to new faggoted ends and pins, and the contingent expenses in the time taken up in the alteration, which would be within three weeks. Mr. Loam makes no remark about the estimate of 700*l.* to replace these iron rods by wooden ones! I know the thousands it cost before we could get the iron ones fixed where they are.

In conclusion, I might remark that I have no other object in thus bringing the subject before the public than that named in my letter which appeared in your Journal of Aug. 21. EDWD. V. CREASE.

LIABILITY OF DIRECTORS—REPORTING CAPTAINS.

SIR,—I think it will be generally admitted that the mainspring of civilisation and reform is Christianity. Oh! that it were more spread in the land of its profession, so as to lead people to begin every transaction under the impressive influence of an expression of some passage of Scripture suitable to the transaction—"Do justly, love mercy, and walk humbly with thy God;" "Do unto others as you would they should do unto you," &c. What a difference there would be in the world! or even in the management of mining companies. It is, however, so far satisfactory to know that the mine captains and directors &c., who may be void of Christian principle, are lately provided with laws by a judicious Legislature to forcibly guide their feet in the paths of justice; in which, I may say, I have seen the travail of my soul, and am greatly satisfied in the (shall I say) consummation of (my hoby-horse) the law of Limited Liability. And I think Mr. T—— would rejoice with me, on finding the case stated in the Journal of July 3, 1858, headed, "The Liability of Directors," on the case of "Seymour *v.* Bagshaw," finally disposed of by the decision of the House of Lords, in confirmation of the judgment of the Courts below, as to the responsibility of prospectus-makers for the contents of the same.

It is an awful thing that after 1800 years of the Gospel dispensation the broad way that leads to destruction is as throngly travelled as ever; that still so few there be that enter in at the strait gate that leads unto life. It is a matter of consolation, however, that though so few enter at the strait gate through Gospel love, there are a few who, for fear of the wages of transgression, enter the narrow way that leadeth unto life (Gospel life). So let us not only view the transgressors of the Gospel in their making of prospectuses for getting companies commenced, as to the responsibility on originating directors, but show the reporting captains that their reports are as truly prospectuses as any that are made by directors, with as much influence in the share market, and for which they ought equally to be held responsible. And shall we not have a commencement against the puffing prospectuses of the captains as well as against the puffing prospectuses of the directors? I am sorry to say it was one of these puffing prospectuses of the captain that has led me into loss. A few pounds sterling loss to a poor man or his saved earnings is as heavy a loss to him as twice the amount to a man that is two or three times as wealthy, and is equally worthy of protection. But, how is the poor man to proceed? or who among the legal profession will undertake to get the poor man indemnified against loss?—*Sept.* 1. K. Q. X.

ROYAL POLYTECHNIC INSTITUTION.—The whole management of this institution has recently been altered, and the place is now restored to its original purposes. In the place of mere puerile amusement, and that class of entertainment which is only suitable to a theatre, lectures on popular science, adapted to the capacities of the million, have been introduced, and the numerous models of machinery classified, having affixed to them explanations of their uses and manner of working. A student of natural science, or an operative mechanic, can now obtain a vast deal of information in these galleries, which he can scarcely obtain anywhere else. The models of locomotive carriages and machinery connected with mines and railways will reward the attention of the visitors who may inspect them, and much information may be acquired by the observant at a very trifling expense and comparatively little trouble.

STEAM-BOILER EXPLOSIONS.

A lecture has been delivered in the Town Hall, Manchester, under the auspices of the Steam-Boiler Insurance Company, by Mr. ARTHUR DUNN, of London, on "Steam-Boiler Explosions, with Suggestions as to their Causes and Prevention." The chair was occupied by Mr. Wm. Fairbairn, C.E., F.R.S.; and amongst those present were Messrs. B. Fothergill, and Crace-Calvert; R. B. Longridge, steam-boiler inspector; C. E. Cawley, Dickenson, Coal Mine Inspector; Byers, Froggatt, Rawton Edge; Councillors M'Dougall, Pratt, and Ellis, and several members of the Steam-Boiler Insurance Company. The hall was filled with a respectable and intelligent audience, consisting mainly of the practical engineers of Manchester and the district.—Mr. DUNN's lecture occupied more than two hours in the delivery, and was listened to with great attention. His object, he said, was not so much to teach others as to stir up a spirit of enquiry into an important and long-neglected subject, and thereby endeavour to solve a mystery which has surrounded steam-boiler explosions. These fearful calamities could never be altogether avoided; but much might be done to reduce the lamentable loss of life and destruction of property which now take place. We could not walk through the streets of Manchester without being exposed to accidents from boiler explosions, therefore all were deeply interested in the question, and it was, in fact, a subject of national importance. He took it for granted that it was an admitted fact that the egg-shaped form of boiler was the best, and no boiler could be safer. Tee result of enquiries into explosions was, that the conclusion was arrived at that we could not tell how they occurred; they were generally attributed either to the want of water, encrustation of the boiler, or to defective boilers. There was no question that pressure was the real force that burst a boiler; it was a sudden rush of steam that caused the mischief. He thought much more importance had attached to the assertion that explosions arose from defective boilers than it deserved. It was sound boilers they had to guard against exploding more than unsound ones, for it was a sudden rush of steam that caused the boiler to explode, and as they knew in some cases scattered a sound boiler into pieces, and in others shattered the strong parts, while the weak and defective parts were left unbroken. There was a mystery about this which required explaining, for they knew that a boiler which had been looked at, the valves and gauges being all right, had in a minute afterwards exploded, and gone to pieces. The favourite theory was that explosive gas was generated in the boiler. He could never reconcile his mind to this. Having given his reasons at some length for arriving at this conclusion, he stated what he believed to be the cause, and how he came to form his opinion from certain experiments he had to make in dissolving siliceous matters in caustic alkali. He described these various experiments, and their results. He found that heat was the primary cause of all steam-boiler explosions, and he thought they would agree with him in that, for there was not a single instance on record where a boiler had burst without a fire under it. What he had to suggest, then, was that they should use a thermometer which would indicate the heat of the boiler-plates, as well as the heat of the water, and the heat of the steam; in fact, to have, in addition to valves and gauges, a master to take care of them when they could not take care of themselves. He had used such a thermometer for years, and it had never deceived him; and he had, by means of the electric telegraph, by using a galvanic battery, so connected the thermometer with the boiler that it would indicate to him if his back were turned the moment danger was approaching. Having resolved to work 300° temperature, the thermometer was so fixed that it gave an alarm the moment that heat was exceeded. So long as pressure alone was trusted to, so long would accidents occur; but if they made temperature the test, they would be able to prevent accidents, though not, of course, in cases where there were careless servants. What they wanted was something to prevent boilers getting into a dangerous state; that was much better than having simply appliances which indicated when they were in a dangerous state. What they wanted, having fixed 300° as the working temperature, was something to tell them that it was exceeding that temperature. He would not do away with gauges and valves to test the pressure, but they were not always unerring, and something more was required. Fusible plugs had been introduced, but they were liable in time to become more infusible, and, therefore, not to be depended upon, and they were liable, therefore, to make the state of a boiler worse than before. He might be asked what difference there could be between temperature and pressure, and this was the doctrine he had been trying to inculcate into the working engineers. He had been endeavouring to show for 14 years that temperature and pressure do not go hand in hand. Now, 300° Fahrenheit ought to give 50 lbs. pressure to the square inch, but did it always? It was quite possible to have temperature without pressure; and if it were possible to get temperature without a corresponding degree of pressure, the valves and gauges now depended upon were a fallacious principle. They could not get pressure without a corresponding temperature, but the reverse would not hold, as he would show them by experiments; and this point, therefore, deserved the most searching enquiry. If he took a vessel full of boiling water and put it into a vessel red hot the water would cease to boil, but if he put cold water into the same red hot vessel it would speedily commence to boil. Here, then, was an instance in support of his theory, and if that were the case in an open, might it not also be so in a closed vessel? He then gave various reasons why he believed this was the case, and explained how he believed this phenomenon arose. Mr. Dunn entered at length into the subject of water in a spheroidal state, and its peculiarities, and then gave a lucid account of his theory of boilers exploding by a sudden rush of steam caused by an accumulated temperature with a corresponding pressure. He did not state his opinions as undisputed facts, but placed them before practical men for consideration, and based his theory upon the fact that boiler explosions generally take place after the boiler has been for a time in a state of rest, and the sudden disturbance of the accumulative temperature causes the sudden rush of steam, thus inducing the explosion. He suggested that the introduction of points into boilers might be useful if placed down upon the boiler plates, as they would tend to keep up an equalisation in the generation of steam. Another mode of regulating the generation of steam might be by pumping small streams of water into the boiler. He thought it possible that the plates of boilers, by the long-continued application of heat and water, might be rendered brittle, and so become dangerous in a certain time. That was an important point for boiler-makers to determine. Mr. Dunn read several objections which had been urged against his opinions, and urged the practical engineers of this district to take the matter into their own hands, and point out the remedy, and not let Government do the work which they were betterable to accomplish themselves. He instanced the case of a Government Inspector to whom he had stated his views, who flippantly remarked that he thought he (Mr. Dunn) overrated the mortality, as only one man died in Woolwich in a year, in fact (said the inspector), he thought the fellows did not get killed, but only scalded. He concluded by observing that though he was not in any way connected with the Steam-boiler Assurance Company, he thought it might be productive of much good. He ridiculed the idea that such an association would give rise to carelessness; and said that it might as well be urged that the formation of life assurance societies had increased the desire to commit suicide.

A very interesting discussion followed, in which several working engineers and boiler-makers joined. One or two combatted the opinions of the lecturer, others endorsed them. One commented freely on the unsuitableness of the men appointed as Government Inspectors, remarking that the working man, who knew the inside and the outside of a boiler, and would creep through the fire-holes, was the proper man to inspect, and not the man who, with all his mathematics, did not condescend to approach nearer than within twenty yards of a boiler to make his inspection. Another speaker attributed many of the accidents from explosion to the excessive competition that has sprung up, and the willingness of factory masters to run down the prices of good firms, and to take their boilers where they could get them manufactured at the least cost, irrespective of quality. Another speaker placed before the meeting the conflicting opinions on the question of surcharged steam enunciated by the Government Inspector of the Royal Arsenal, Woolwich, on the one hand, and the Franklin Institute, in America, on the other.—Mr. Dunn having replied to the various speakers,

Mr. FAIRBAIRN offered a few remarks upon the lecture and the discussion. He enforced the necessity of making boilers of the best possible material, and said he found from his practice that there was great difference in this respect. He thought it was necessary to have an inspection of plates before they were used. He also called attention to the mode of pumping holes in the plates; if the instrument was blunt they burst the hole, though it was not observed, and they made the plate very dangerous. He impressed upon them the importance of using sharp punching tools, as more accidents occurred from the use of blunt punching tools than from any other cause. After some observations upon the best form of boiler to be used, he briefly referred to the question of the collapse of flues, and the most approved remedy of placing bands at equal distances along the interior to strengthen the flue. With respect to the Boiler Association, he thought it had done a great deal of good, and he thought the proposed insurance company might do a great deal of good, under certain circumstances, but they must be careful they did not hold out bonuses for explosions. He should be glad to assist the company by a contribution, and hoped the society would not take a boiler in unless it was of the best construction. With regard to Government interference, he had never advocated it. If they were to do without Government interference they must increase the number of associations like the one they had, which had answered so well. There had been only one explosion since the society had been formed, and that was owing to neglect, and, of course, no society could prevent absolute neglect. He expressed his opinion that there was something in the theory propounded by the lecturer, and promised to attend to the subject, and to make experiments to prove the correctness or otherwise of the theories advanced. He said experiments had been made in Manchester, but had not been at present so satisfactory as to present to the public, but they would be placed before them shortly, and any suggestions on the subject would receive attention.

Votes of thanks to the lecturer and to the Chairman, spoken to by Mr. Fothergill and Mr. Councillor M'Dougall, concluded the proceedings.

THE ASSOCIATION FOR THE PREVENTION OF STEAM-BOILER EXPLOSIONS.—At the usual monthly meeting of the committee of management, held on Tuesday, at the offices of the secretary, Mr. Henry Whitworth, Corporation-street, Manchester, when the chief inspector, Mr. R. B. Longridge, presented his monthly report, from which the following are extracts:—During the month 271 visits have been made, 11 of which have been special, and 746 boilers and 563 engines inspected. Of these boilers, 27 have been examined internally, and 49 have undergone a thorough examination. Diagrams have also been taken from 77 cylinders. Of these boilers 31 were found in a defective state, from the following causes:—Injury resulting from deficiency of water, one of these dangerous, 2; corrosion of plates, 8; fracture of plates, 2; safety-valves out of order, 12; water gauges out of order, 3; pressure gauges out of order, 4: total, 31. These defects were all of the usual character, and do not merit further remark.

NOVELTY IN STEAM-BOILERS.—An apparatus for generating vapour or gas for mechanical purposes, which has given great satisfaction, has just been tested at the Eagle Works, New York. The inventors claim for it great economy both of space and fuel, and the fact of a 10-horse boiler occupying but one-fourth the space of an ordinary boiler, and consuming but a few pounds over a ton of coals per week, would seem some justification of their claim. The boiler is extremely simple, being a spiral worm or coil of tube, 143 ft. long, encased in a cylindrical brick stack 5 ft. 6 in. in diameter, and 7 ft. high from the grate bars, which are 2 ft. 6 in. from the ground level. On the top of the stack, and communicating with the coil, is an iron drum, 6 ft. long and 12 in. diameter, from which a pipe carries steam to the engine. The coil is supplied at the base by a pipe leading from a chamber into which air and water are forced, in the proportion of 30 parts of air to 1 part of water, by a steam pump driven by the engine. The chamber in which the water is impregnated with atmospheric air is heated by the exhaust steam discharged against it before it passes into the spiral boiler over the fire in the stack.

Meetings of Mining Companies.

WHEAL ADDAMS MINING COMPANY.

The quarterly meeting of adventurers was held at the offices of the company, St. Helen's-place, on Monday, Mr. BENTLEY in the chair.

Mr. LAVINGTON (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed. The following report was then read:—

Aug. 28.—I beg to hand you a report of the operations at this mine since the last general meeting. Our operations have been chiefly confined to the south engine-shaft and the trial shaft; the former we have cleared and secured about 10 fms., and hope shortly to see the 40, when we have got through the run; I intend to go as deep as the water will permit, and bring a level back on the western lode under the trial shaft, to extend it north to the end of the sett, and bring the plains down to it. At this point we have had more difficulties to encounter than I at first anticipated; when we have reached the 40 I purpose to cross-cut the lodes right west to the western lode, and then run a rise up to the 18 to meet the point at the present end, seeing that I shall have a very valuable piece of ground for lead and blende. The trial shaft is now through to the 18, and set to sink to the 28, at 30s. per fm., and 5s. per ton for lead and blende. The mine is thoroughly ventilated, and every prospect shortly in this shaft of reaching a fine course of ore. I intend to sink the shaft to 40 fms. deep, when there to make a plain of it by laying down a railway from the surface, to go down on the western lode to reach the bottom level, as but little is done on this lode throughout the length of the sett, although where the lode is seen in the upper levels, it is rich for lead and blende. Laying down railways in the shape of plains in the western lode will be far better, seeing less timber will be required, and greatly facilitate getting away the stuff and ventilating the mine. This way of working will save great expense by not sinking shafts through the flookan, seeing we have a dry mine. We have laid open the 28, between the 20 and 30, south of the old engine-shaft, and sunk a winze under it about 5 fms., also run a rise from the 28 to the 18 to ventilate the same. At this point we have made good discovery for blende on three lodes, about 2 fms. apart from east to west. The last sampling and this one will show you something of its value, seeing we have now 120 tons of blende at the stores, and about 2 tons of lead on the mine. At this point I hope to take away a great quantity of blende and some lead, by stripping the lodes right up to the 8 for about 20 fms. long, which is now nearly all set on tribute, not exceeding 10s. per ton for blende and 3*l.* per ton for lead. Under this level I do not intend to do much before I have taken away the water. As to the lode from which the copper and silver ore have been taken, I shall say very little concerning it before I cut the lode at the 28, which I hope to do shortly by a cross-cut from a level now driving, and also by a cross-cut from the new engine-shaft. I trust then to find things looking well, as from all appearances thousands of kibbles are broken and laid on the stulls, but of its quality I cannot say until I see it. You will perceive by the books that there have been sold about 230 tons of blende, and about 12 tons of lead, of the value of 970*l.*, while the monthly costs will not exceed 500*l.* If I have good success at the south engine-shaft in reaching the 50, I trust to be able to send in 200 tons of blende the next three months. We are now clearing the ground and making way for the necessary buildings to receive the engine and crusher, and intend in a few days to level the ground and set the leat to bring in water for the use of the engine and floors. When this is completed I hope to able to sample as much ore in one month as we do now in three. I beg to congratulate the adventurers upon the cheering prospects of the mine, and hope to be able to show them that Wheal Addams Mine for profits soon will stand second to none in this neighbourhood.—R. MOORE.

The CHAIRMAN considered the report very satisfactory, as it held out good hopes for the future.

Lieut. WATSON, R.N., said he had recently joined the adventure, and he should like to hear some little history of the mine.

Mr. LAVINGTON replied that the mine had been worked by the present company about 18 months. It was formerly worked in conjunction with Wheal Exmouth, under the name of Exmouth and Addams United, and at that time considerable importance was attached to the lode in Wheal Addams, and that might be considered proved, as during the last three months they had made a profit of 570*l.* They had bought a small engine with crusher attached for 330*l.*, which would be paid out of the accumulating assets of the mine. The reason of the separation of the two mines arose from the lode being cut in Wheal Exmouth, which enabled them to pay regular dividends, and they considered it desirable that Wheal Addams should be left to another company to work.

Mr. RIVETT complained that the engine was not up, as they were losing a great deal of valuable time by the delay.

Mr. LAVINGTON said it arose through the buildings not being ready, and certain of the work could not be done until the corn was cut. The whole of the machinery was on trucks ready for delivery.

Mr. STEWART considered the explanation satisfactory. Mr. Moore he believed would do everything he could to expedite the work, it was to his interest to do so, as he held half the mine.—The report was then received.

Mr. LAVINGTON then read a statement of accounts to Aug. 30, from which the subjoined is condensed:—

Ores sold	£972	14	1		
Calls	12	5	0	= £ 984	19 1
Mine cost, May, June, and July	£415	13	8		
Balance April cost	23	13	3		
Loan repaid	199	12	0		
F. S. Hemming	23	0	0		
Assaying	4	4	0		
Dues	63	5	3		
Discount	6	10	7		
Timber	57	3	2	= 793	1 11
Balance in favour of adventurers				£191	17 2

Lieut. WATSON considered their position highly satisfactory, and wished to know whether all the liabilities were charged up?

The CHAIRMAN replied every liability was charged, and all the shares were placed.

The accounts were then passed. Lieut. Watson, Messrs. Moore, Stewart, Torkington, and Bentley, were unanimously elected a committee of management.

The CHAIRMAN believed that, when the engine and crusher were erected, the sun would shine upon them at once.

Mr. TORKINGTON would ask where there was a mine that had done so much in eighteen months, with calls amounting to only 3s. 6d.? He believed at the present time not a single share could be purchased.

A vote of thanks to the Chairman terminated the proceedings.

PENDEEN CONSOLS MINING COMPANY.

The quarterly meeting of adventurers was held at the Auction Mart, Bartholomew-lane, on Tuesday, Mr. W. E. D. CUMMING in the chair.

The CHAIRMAN read the notice convening the meeting, and the minutes of the last, which were confirmed.

A statement of accounts was read, from which the following is condensed:—

Balance last audit	£371	18	5		
Mine cost, June, July, and August	725	7	0		
Merchants' bills	255	0	1	= £1352	5 6
Calls received	£770	0	0		
Sundries	32	17	1	= 802	17 1
Balance against adventurers				£549	8 5

The following report of the committee was read:—

Aug. 30.—The committee have much pleasure in again meeting the shareholders, and beg to congratulate them on the improving prospects of the mine. Since the last general meeting the committee have considered it advisable to make some alterations in the management of the mine. The workings at the mine having now assumed a more important form, the committee have deemed it requisite to afford Capt. Eddy the assistance of another agent, they have, therefore, appointed Capt. John Carthew, of well-known experience and ability, at a salary of 2*l.* 2s. per month. He will visit the mine as frequently as his time will permit, and inspect it fully once a month, on the setting day, give his aid in setting the work and report jointly with Capt. Eddy. The purser having tendered his resignation, the committee have accepted the same, and have appointed Mr. Richard White as purser, whose duties will commence on Sept. 1 next, at a salary of 2*l.* 2s. per month. Several of the shareholders having for some time past expressed a desire that there should be an office in London where the books and the accounts of the mine should be open for their reference, and for the registration of transfers, the committee, being of the same opinion, have made arrangements with Mr. D. Cohen, who has agreed to undertake the office of secretary to the company at a salary of 4*l.* 4s. per month for the present, including the use of his office for transacting the business of the mine. The committee have purchased a crusher, which is now being erected, and they expect it will be completed by Sept. 6.

The CHAIRMAN considered it advisable to give Capt. Eddy all the aid in their power, and had appointed Captain Carthew as inspecting agent. He was connected with three of the largest mines in Cornwall, and had had great experience both at home and abroad.

Mr. MICHELL wished to know whether Capt. Carthew would go underground, because he was a very old man?

The CHAIRMAN said his agreement was to go underground once a month, to measure the ground, and look to the settings, and see that the work had been properly done.

The report of Capts. Eddy and Carthew were next read, as follows:—

Aug. 28.—I am requested by Mr. Cohen to join with Capt. Eddy in this day's report, but I find that Capt. Eddy will report to you what work we have been doing since the last meeting, and I have only to state how the mine is now looking. The 70 fm. level is now extended 41 fms. north of engine-shaft, and the last 21 fms. in a very kindly, good-looking copper lode, from 18 to 30 in. wide, and in this lode there are very rich stones of ore, just such as sent on to you a few days back. The lode in this end is now 30 in. wide. Capt. Eddy was underground yesterday, and will report to you how the end looked then. The 82 fm. level is extended 20 fms. north of shaft, but the east wall of the lode has not been seen for the last 3 fms. driving, nor do we intend to take down the lode before this level is extended 2 fms. more. This end looks very kindly indeed: 20 fms. north of engine-shaft there is a winze from the 70 to the 82 fm. level, and there is orey ground north and south of this winze from the 70 to the 82 fm. level. We have four men stoping north, and four men stoping south from this winze, in copper ground that will pay well for working; and 4 fms. below the 70 fm. level we have four men on tribute, at 10s. in 1*l.* The 94 fm. level is only extended 6 fms. north from shaft; we have stones of good ore in this end, and as the best copper ore ground was only found 20 fms. north of engine-shaft, you will at once see that we have to extend the deep levels north to get under the best ore ground. In Levant and Botallack all their rich ores have been under the sea, and our 70 is but now north to the sea. I here send you Mr. Bevan's produce of the samples I sent him on Thursday last:—No. 1, 2 tons, prod. 30¾; No. 2, 50 tons, 6½; No. 3, 60 tons, 3¾. On the whole, better than I expected. We are sinking a winze below the 70 fm. level, about 18 fms. north of the last winze; we expect this will be in good ore ground.—J. CARTHEW.

Aug. 28.—Since the last general meeting of adventurers we have driven the 94fm. level north 6 fms., and south 3 fms.; the lode in this level will average 2 ft. wide, with stones of ore and much mundic. We have also cut shaft and winze plat, put in pent-house and cut fork, and sunk shaft 9 ft. below the 94 fm. level; the lode at the shaft is large and promising. The 82 fm. level has been driven about 26 fms. north of sump-shaft, through a large orey lode, the average about 2 ft. wide; the lode in the present end is now split in two parts, each part carrying its leader of ore, but has the appearance of a quick intersection. We are now stoping the back of the 82 with the intention of setting on tribute. The 70 fm. level north being about 40 fms. from sump-shaft, the last 20 fms. in fair orey ground, we intend to work away to tut or on tribute; the lode now in the end will produce 1½ ton to the fm., worth 7*l.*, driving for 4*l.* 10s. We have also a new winze set 3 fms. behind this end, producing the same quantity of ore to the fm. The stopes in the north and south ends of the 70 winze will produce 1½ ton to the fm., worth 7*l.* 10s., stoping at 4*l.* We have also set a new tribute pitch to four men to work at 10s. in 1*l.*, to extend 4 fms. below the 70. We consider the dip of our ore to be north, therefore our deeper ends will be driven further north to meet the ore in the level above. We have now employed underground 38 men and 11 boys, 2 engine-men, 1 man driving skip whim, 1 lander, 2 filling skip, 1 smith, 1 assistant, 2 carpenters nearly all the time, 1 mason, 1 pit and timberman, 1 man, 5 women, 2 girls and 2 boys dressing ore, 5 labourers and 1 boy being employed in the mine—72 at surface and under ground. Our crusher will be ready to go to work on Sept. 6, when we think we shall be in good time with the ore for the next western sampling. I hope you will all be well pleased with our sale of ore, and the steady improvement of the mine.—W. EDDY.

The CHAIRMAN, in answer to a question, said there was 480*l.* worth of ore now at surface.—The reports were then unanimously adopted.

The CHAIRMAN proposed that Mr. Bawden should be treasurer, which was seconded by Mr. CLIFFORD, and carried unanimously.

The CHAIRMAN considered that a call of 3s. per share should be made, payable on or before Sept. 14. The balance against the mine included the August cost, and he believed that amount would be sufficient to carry them on until the next sale of ore.

Mr. GREENWOOD was much pleased with the appointment of Mr. Bawden as treasurer, as he believed they could not have a better man, but it was unfair to call upon Mr. Bawden to make advances for the benefit of the mine, and he considered they ought to make the call 4s. 6d. per share. He must remind them that Mr. Bawden had engaged to pay for the crusher.—Mr. BAWDEN could see in the room 500*l.* of the call, which would be paid immediately if necessary.

Mr. BIRDSEY observed that the subject had been well canvassed by the committee, and they could see their way pretty clear: a call of 3s. was sufficient.

Mr. HALLETT said when they saw the result of the sales of ore they could decide what course to take.

A call of 3s. per share was then agreed to, and the committe of management re-elected.

Mr. HALLETT proposed a vote of thanks to the purser for past services, seconded by Mr. MITCHELL, and carried.—A vote of thanks to the Chairman terminated the proceedings.

QUARTZ ROCK REDUCTION COMPANY.

An adjourned meeting was held at the offices of the company, Old Broad-street, on Tuesday, Colonel KENNEDY in the chair.

The CHAIRMAN said the principal object for which they had met was to announce the result of the assays made by Mr. Johnson and Mr. Squire. They had obtained from the Crystal Palace Company 1 cwt. of quartz, which was broken up, and each party alternately selected a piece. The result of Mr. Johnson, by assay, was—compact quartz, 2 ozs. 5 dwts.; ferruginous quartz, 5 ozs. 3 dwts.: average, 3 ozs. 14 dwts. Mr. Squire returned five separate parcels, which produced by assay as follows:—No. 1, 2 ozs. 2 dwts. 12 grs.; No. 2, 2 ozs. 1 dwt.; No. 3, 4 ozs. 18 dwts. 12 grs.; No. 4, 4 ozs. 7 dwts. 12 grs.; and No. 5, 1 oz. 17 dwts. 12 grs.; yielding an average of 3 ozs. 1 dwt. 9 grs., which was not a very great difference, and showed that the specimens had been very fairly selected. Mr. Johnson does not pretend that the mill will get 3 ozs. 14 dwts. from precisely the same stuff, but he should like to hear from that gentleman what quantity it was likely the mill would yield?

Mr. G. R. JOHNSON (Johnson and Sons, Basinghall-street) said it was impossible for him to form a calculation as to the probable result from the mill in California.

Mr. CLEMENT said the finer they ground the quartz the more gold they would lose.

Mr. SQUIRE considered the loss of gold was in the amalgamation, which, if it were perfect, would be very little.

The CHAIRMAN thought that Mr. Squire had something beyond what he now stated, and he wished to know what advantage his system was over the ordinary way?

Mr. CLEMENT considered Mr. Squire would be successful if he did not attempt to grind it very fine.

Lieut. WATSON said that Mr. Squire did not prove his own case; he had promised to do what had never been done before. If he selected only 20 tons out of the 100 they would save the expense of crushing 80 tons. The question was simply whether Mr. Squire could render any service, and then were they willing to go to the expense? He believed a vital error had been committed in crushing the ore indiscriminately, as there could be no doubt it ought to be selected.

Mr. SQUIRE said Mr. Johnson and himself had selected an equal quantity of quartz; but had he been operating on the mines he should have selected very different quartz. If he did not think he could benefit both himself and the company he should not leave home to go to California.

Mr. GREEN said the quartz appeared a fair sample, and the question was if they subscribed a further sum whether they would be in a position to work the property to a commercial advantage; if not, they had better get out of the difficulty as soon as possible. He was inclined to go on, and if the Chairman decided to do so, he should be ready with his subscription towards testing Mr. Squire's discovery.

The CHAIRMAN did not see that Mr. Squire in his own mind had calculated the results. He had hoped Mr. Squire would have been able to give some data upon which they could come to some conclusion. After the experience they had had in gold companies he would not urge a single argument to induce the shareholders to come forward. He wished to know from Mr. Squire what would be the average amount of quartz he would select, as they must not lose sight of the expense of mining, for supposing Mr. Squire selected only 5 tons out of 100, the 5 tons would have to pay the expense of the 100. The next point was, admitting Mr. Squire made out a case, and they decided upon going on, they must wait until they had ascertained the fate of their property on Oct. 6, as they might find it sold by the sheriff at a very small price. They had, therefore, to take every circumstance into consideration before they determined whether they would go on. He wished to hear from Mr Squire, from the knowledge he had of Californian quartz, and the specimens he had seen, what was the proportionate amount he would reject from the quantity raised?

Mr. SQUIRE replied, about 25 per cent., and he based that calculation upon the stones he had received to operate upon, and the quartz he had seen.

The CHAIRMAN said the next important question was the amount of gold that would be lost if Mr. Squire's plan was adopted. Mr. Clement estimated the loss was 50 per cent. at the mill, as compared with the assay by Mr. Johnson.

Mr. SQUIRE said by his process they not only obtained the gold, but got rid of the great antagonistics to mercury—the sulphur and arsenic—so that the amalgamation must be more perfect. He did not anticipate losing on an average more than 10 per cent.

The CHAIRMAN wished to know whether he had any particular grounds to sustain that calculation?

Mr. JOHNSON said Mr. Squire's views were perfectly sound. If he got rid of the sulphurous and arsenical pyrites he must get a larger proportion of gold from the quartz.

Lieut. WATSON wished to know the cost of operating, because the calcining must be done with fire, and could fuel be obtained?

The CHAIRMAN said there were other considerations respecting Mr. Squire's process—Would water affect it? The impediment they met with at the present time was—first they had too much water, and then not enough. In one fortnight the returns were 900*l.* upon an expenditure of 150*l.*, leaving a profit of 150*l.*, but that was done by fits and starts; so that, calculating the stoppages, one fortnight eat up the profits of the other.

Mr. SQUIRE said they had a steam-engine at work in California, and he believed they had no difficulty in finding fuel for it. If he had the quartz raised by the Quartz Rock Mining Company, he would repay the whole of the capital in 18 months.

Mr. CLEMENT remarked that he was about to purchase 1 ton of the quartz, if he could, and operate upon it at some works at Pimlico, when they should know the result.

Mr. GREEN was of opinion that if they advanced a little more capital, and had patience, they would yet bring the concern into a paying condition.

Lieut. WATSON suggested that Mr. Squire should give such information confidentially as would enable the directors to judge whether the quartz could be worked at a profit.

The CHAIRMAN considered that Mr. Squire ought to satisfy some committee to be appointed as to his plan, because to send out any party without a knowledge of what he was going to do would be absurd. If he could convince them that he should select 75 per cent. of the quartz, and only lose 10 per cent. of gold, it would be perfectly conclusive, and there could be no doubt of their coming to very good terms. He quite agreed with the observations of Lieut. Watson.

Mr. SQUIRE said he had made no distinct offer to go to California. It was for the shareholders to consider whether it was desirable. However, he should have no objection to communicate, in confidence, his process to the Chairman.

The CHAIRMAN said, under any circumstances, they could not decide the course to be pursued until after they heard the result of the law proceedings, on Oct. 6.

The CHAIRMAN moved a vote of thanks to Mr. Squire, which was carried unanimously.

After a lengthened conversation, the meeting was again adjourned. A vote of thanks was passed to the Chairman.

WILDBERG GREAT CONSOLIDATED MINING COMPANY.

The fifth annual general meeting of proprietors was held at the Hotel Disch, at Cologne, on Aug. 28, Mr. FREDRICK TWYNAM in the chair.

The business of the meeting was of a merely formal character, the directors and shareholders having met previously at the preliminary meeting held in London on Aug. 23, and which was duly reported in the *Mining Journal* of Saturday last.

The notices convening the meeting, and the minutes of the last general meeting, having been read and confirmed, the Chairman read the council's report.

Mr. ARTHUR DEAN, the company's late engineer and superintendent, said he objected to a passage in the report in which the directors state that the amount of debts due to merchants in Germany proved to be 1430*l.* 4s. 1d. more than they were reported to be by the late superintendent. He (Mr. Dean) declined to take any responsibility for accounts of which he had never seen or heard, or for payments made without his certificate. It was, Mr. Dean contended, the duty of the present superintendent to have sent all accounts for liabilities incurred by Mr. Dean to him for certification before paying them; but nothing of the kind had been done, and large sums had been paid away without any certificate whatsoever. He (Mr. Dean) should wish to examine the vouchers and accounts at the mines before admitting that the payments had been properly made.

In reply to a question from Mr. Dean, Mr. BRANDT said he thought the greater part of the sum of 3430*l.* had been paid without Mr. Dean's certificate.

Col. HISLOP thought it was very important to the interests of the company that Mr. Dean should have an opportunity to examine the accounts.

After some discussion, it was arranged that Mr. Dean would proceed to Wildberg as soon as he conveniently could.

In the course of conversation, it was elicited that all June costs were charged in the sum of 3430*l.*, although Mr. Dean ceased to be connected with the company after June 5, 1857.

Upon the motion of Col. HISLOP, an unanimous vote of thanks was passed to Mr. Dean for his offer to examine into the accounts, and for the valuable information he had afforded to the meeting respecting the mines.—Votes of thanks were also passed to the Chairman, the engineers, and the other officers of the company.

MINING IN JAMAICA.

WHEAL JAMAICA COPPER COMPANY.—Charing Cross Mine: The lode in the end of the 65 south is the same as last reported, but is now carrying a branch of yellow copper ore from 4 to 6 in. wide; the size of the lode continues to be fully 7 feet, though we have met with a hard bar of ground. We have taken out from this point about 2 tons of copper ore. We have now driven in the 65 north 14 fms., and south 4 fms. Work done at Castle James Mine, 6 fms. 4 ft.; Mount Woolfry's Mine: total, 4 fms. 4 ft.

ELLERSLIE AND BARDOWIE MINING COMPANY.—Nothing of importance to notice by this mail. At Salisbury Plain, the yield is not quite so large as when we last addressed you.

RIO GRANDE MINING COMPANY.—Capt. Arthur's last advices from Portland are to Aug. 2. He had sent to Port Antonia, for shipment to Kingston, a quantity of ore, and was dispatching more on the following day. He states further—"I have been working for the last fortnight at No. 5 Brookdale, and also at No. 3 Chesterfield. We have a very good lode of copper ore at each place. The further we sink and drive on it the richer it appears to become.

CLARENDON CONSOLIDATED MINING COMPANY.—J. Martin, Aug. 7: Stamford Hill Mine: Since I last wrote you we have completed the cutting down of the engine-shaft from the No. 3 level to the 46. We have now to put four sets of timber in the level; this will make the shaft complete from the surface to the 46 fm. level. We shall then commence to put in the ladders, in order to get the pumps and engine-rods in their places. The shaft men are still engaged in cutting down the engine-shaft below the 46; we are now down about 6 fathoms. We have had a small breakage in our pump this month, which rather delayed us in cutting down the ground, but we have put it all right again, and will push on to the bottom, now distant about 6 fathoms more. We have driven east of the cross-cut, on the north lode, 3 fathoms in the past month, which is 2 feet wide, composed of green carbonate of copper ore, and prian with yellow ore, of which we have broken some very rich stones. The lode at this place is rather broken up by coming in contact with the cross-course I spoke of in my last, but I hope in a short distance to get in settled country, where we shall find the lode more regular. I would recommend to your notice the driving a cross-cut south from our present lode in the 46 to cut the two large lodes we have to the south of us. I have seen the back of one, from which we have broken some good grey copper ore; it is about 4 feet wide, composed of green carbonate of rich copper ore, with prian; a lode well worthy of a good trial. The I should say is the Charing Cross lode, from which they are breaking some fine rich copper ore. This cross-cut can be driven by natives at a very small outlay, as we shall be driving this at the same time as we are sinking the engine-shaft, and the same railroad will do to bring away the stuff we may meet with. We have the engine and several parts of the machinery at the mine, and the rest is being brought as fast as time and weather will permit. The surface work is going on satisfactorily.

MINING MARKET.—We have received the following communications:—

From Mr. JAMES CROFTS:—No proof is needed beyond the concurrent testimony of the daily press that an amelioration in monetary and commercial affairs is still a matter not only in abeyance, but is probably likely to extend its influence far beyond the usual limits of similar periodical derangements. Thus, we hear that the shipping, colonial, manufacturing, and trading interests in the aggregate suffer to an extent heretofore unknown; and especially taking into account the prolongation of the crisis, as demonstrated in failures of the hitherto highest class of firms, both abroad and at home. The index to this actual state of things, it need not be stated, is the money market, upon which commerce still fails to draw; and but for foreign and other loans now in course of negociation, it is probable that the value of capital would be at its lowest ebb; whilst, as it is, its value is everywhere totally unremunerative, and that under such circumstances more of it should not find its way into the speculative markets is a problem, the solution of which is rather for a "Ricardo," than within the scope or grasp of the writer. The present remarks glancing over a period of fourteen days, much that would have been interesting on the mining market has gone into oblivion; whilst events remain to be descanted upon which point to the necessity of important changes in the organic and practical constitution as regards the past, and a similar necessity looking to the future. In the palmy times of the market, dating a year or two back, there grew up several new modes of transacting business, and treating mines and mining shares, which have at last become a gigantic evil, and the tests of time and talent applied to their working have only demonstrated that in a market of limited capital, as compared, for instance, with the Stock Exchange, there were limits also to sound business; whilst exuberant success in the origin of these transactions only prompted the pushing of a principle to an extreme unknown to the steady-going broker or dealer of former days, and apparently offering perfect immunity against losses for all time. The writer here refers, in the first place, to a determination on the part of a number of individuals acting in concert perfectly *bona fide* towards each other, and not less so to the public, to support particular mines, and by bringing to bear upon that support their combined energy, capital, skill in mining, and the most untiring industry, to raise a particular mine to a pinnacle above all others, and in which success for a time was perfect, and, therefore, undisputed. There were necessarily three classes of persons engaged in these transactions—the individuals themselves; the mining market, composed of either brokers, jobbers, and dealers; and lastly, the public; and the sequel is that all have come to suffering and loss, as represented by transactions in shares which, after attaining a maximum price of 7*l.* or 8*l.* or 15*l.*, or 9*l.* and 10*l.* per share, fell respectively into 20s., 4*l.*, and 3*l.* 10s. per share, whilst their ultimate value is, of course, a problem either way; the writer's wish being that it might be (and may be) upward. But, in the mean time, it is to the injury actually done to the interests described (and to none more severely, as we state with deep regret, than to the promoters of the system themselves), that we make particular allusion, and to its direct effects upon the public mind, by lessening in a strong degree the confidence in a market which alone can lead to its permanent aggrandisement. As the question stands at the moment, we are not prepared to state that such a course of business, if carried on within moderate limits, is absolutely unsound in itself, there being abundant and vital reasons why particular mines should be supported, and so long as support is justified by a combination of surrounding circumstances, all favourable to the development, and carried out with good faith towards purchasers, a reverse in a particular mine never can be open to serious complaints, the more especially if it does not entail serious losses. The business of mining is sufficiently speculative in itself to dispense with the adventitious aids alluded to, which, however, we believe, from recent events, have received their death blow.

Another evil on the market, but one which rather affects the market itself than the capitalists who speculate in it, has been the buying and selling of shares for "time" for settlement on the bi-monthly account days. An influential pen has already made strong notice of this system in your Journal, and in a few words it may be stated that much diminished amount of business is already perceptible under this head. Without adequate capital to support differences the system becomes sooner or later a mill, whilst the possessor of capital will not continuously subject himself to its loss by defection on the part of those who, as it may be, have bought shares for others unable to meet a heavy fall in price; and thus that the system is pernicious needs no further proof or comment. It is further to be remarked that of late very serious and sudden falls have taken place in the market value of a number of mines, which, as recent cases may be instanced, Wheal Harriett, West Grenville, and Rosewarne United—the latter from 40*l.* or 45*l.* in a single day down to 30*l.* or lower. To investigate the causes of such sudden changes in value of mines, understood by previous accounts to be progressing steadily upwards, is beyond the writer's ability; but in particular allusion to the latter instance, it must be stated that even Cornish capitalists were buying shares at the highest price quoted, although they had risen in value in a short period from an almost nominal one of 10*l.* or 12*l.* per share. Undoubtedly the public are indebted for much of the sudden fluctuations to the facilities afforded to private parties by the telegraph, and the accord between agents and selected individuals on the London market, who since receiving a telegram from a given mine, whether announcing a failing off or an improvement in the lodes, as silently operates upon the market to, of course, their own exclusive benefit.

In particular quarters, and in good shares, there has been a large business transacted during the last 14 days, principally, it may be said, in heavy dividend mines, whilst progressive stocks have participated in the demand to an extent which shows a strong desire to invest. The writer cannot add that the majority of these transactions have proved immediately profitable, it being much more a habit of the public to purchase when the market is excited than when quiet. Wheal Edward, Great Wheal Alfred, Lady Isles, and Wheal Harriett, we regret to state, appear to be undergoing a gradual process of depreciation. Vale of Towy remains firm, and is likely to improve in value. Great West Grenville, and North Downs, are flat and lower; yet, as all these mines come into the category of sound ones, it is probable they will sooner or later rally in price. Pendeen Consols show strong symptoms of advancing to 4*l.* per share, and even much higher. The late meeting was of a most satisfactory character, and seeing that they have in the face of a call, it is a fair inference that the mine is solidly progressing. A business has been done in the Old Tolgus United shares, to which the writer on previous occasions lately called special attention; and so far as the present value of the shares, the highly encouraging reports from the mine are a criterion of value, there is possibly shares offering such advantages to present investors. The ends are all in a satisfactory condition for producing ore, and it is stated that the rise on the south lode is already 40*l.* per fm. for copper ore. When it is remembered that the mine is in 600 shares, and in so rich a locality, and having in proximity the important South Tolgus and the South Tolgus Mines, which are selling at a value of 150,000*l.*, and paying regular handsome dividends, the public will not require much urging (which would, in fact, be entirely out of place) to possess themselves of these shares *at the present low price* indicated in the Journal, remembering that when the shares were at 100*l.* each, if that sum, the mine was so little developed as to make them worth double that value the present moment, its advanced condition taken into consideration.

Owing to an unfortunate failure in the market of parties holding very large Catherine and Jane Consols, and whose energetic support of it from the origin is known, another call has been made of 1s. 6d. per share, which, very naturally, has many shareholders by surprise, the mine having started as altogether free from "liability of calls." A former untoward event, that of a party who purchased 200 shares, and failed to perform his contract, necessitated a former call of 2s. 6d. per share. It will be seen from the report of the meeting, held Aug. 27, that the balance of the mine of 616*l.* originated in arrears of calls over due, and that, therefore, the call *in itself* is in a perfectly sound state, and in no way belies any recommendation of the writer. It remains to be seen, in the first place, how the call made will be responded to, which, looking at the highly respectable constituency, for the most part, must be favourable; and, in the next place, the course to be pursued with shares upon which the call will not or cannot be paid. An energetic and able management is quite equal to the emergency, and so long as the lead lode continues its present produce, or improves in it, the concern, even in its present crippled state, presents no risks to the shareholders, whilst the public, or the present shareholders themselves, may have an opportunity hereafter of investing in the mine, or of increasing their investments, at a price that will vastly increase the chances of future profits. Catherine and Jane Consols are not encountering the fate of most mines which, at one time or other of their career, have unforseen difficulties, from which, in the majority of cases, when the mine itself is *bona fide*, it emerges and runs a course of uninterrupted prosperity, which the writer has and believes is a fate reserved for it; and especially when, in fact, 600*l.* of the liabilities above-mentioned is upon a portion of the sum of 1000*l.* paid for the dues of ore produced for ten years, and that time will be given, we understand, for its liquidation.

Mr. P. WATSON.—We extract the following from this week's Circular:—

Having recently returned from Cornwall and Devon, investigating carefully the present position and looking at the future prospects of several undertakings, I cannot suggest that no time should be lost in making a selection in dividend mines, which may be relied upon for paying 15 to 20 per cent. on present market prices, and also from promising progressive mines now on the *tapis*. The mining market during the month of July and August presented a languid and drooping appearance, and the result has been a very serious fall in all mining securities; the cause, however, has not been much on account of any falling off in the present or future prospects of the mines themselves, as from a combination of circumstances, principally caused by a reduction in price given for ores, owing to the inactive state of trade, and a preponderance of sellers of shares without a corresponding demand. The prevailing feeling is, however, that the home trade has seen its worst, and is now showing evident signs of improvement, whilst the foreign trade is in much the same condition. The American firms are declining, and a number of the large London shipping houses have been buying very freely. The management of railway companies generally seem to have shaken the confidence of the public in these undertakings, and it is the general opinion that a great reduction in the market value will ere long ensue; and as there are many mines paying three and four times the amount of the dividend of the best paying lines, it is fully anticipated that considerable investments will be made in some of the tried and long-standing, as well as mines, also in progressive mines, where the calls are light, or in those which are on the eve of paying dividends.

MINERAL WEALTH AND MECHANICAL INVENTION.—The quantity of rolled iron made since 1784 has exceeded 30,000,000 tons, which is more than 3,000,000 tons of rails, and orders have recently been given for 100,000 tons more rails for India. More than 9000 miles of railway lines have been made in Great Britain, upon which 1,200,000,000 passengers were carried over 80,000,000 miles in one year; probably less than 300,000 miles of iron wire have been used, in Europe and America, for railway telegraph conductors, besides 8000 miles of telegraph iron encircled by an armour of 25,000 tons of twisted wire. England is almost making more rolled iron than all other nations united can produce.

[We have gleaned the foregoing particulars from a statement prepared by Mr. B. in furtherance of the claims of himself and aged sisters, as the descendants of Mr. R., to whom those connected with the several great commercial interests are indebted for the existence of the means by which such vast works have been created, and by which they obtain returns for their capital. An advertisement in our front page gives particulars by which those who wish can aid in alleviating the present requirements of deserving family.]

FOREIGN MINES.

COPIAPO MINING COMPANY.—Checo, June 15: On the main south lode, the 20, west of Harman's shaft, still produces a little ore. The 30 east is paying cost. The 40 to 50 chiflon is communicated, having passed through a lode 2 ft. wide, of best dark sulphurets, and the whole of this orey ground is now ready for stoping. In the western sett, chiflon No. 2, the stopes east and west produced last month nearly 3 tons per fm. of 19 per cent. carbonate—nearly 600 quintals, with two men. They have extracted all the ore in sight, and will now sink east, expecting to meet with a cross lode.—DULCINEA, June 30: The estimated produce for June was 656 quintals, worth £473. The mine is still much the same in appearance, and they hope to take out this month the same quantity as last.

THE MARIQUITA AND NEW GRANADA MINING COMPANY have advices to July:—Santa Ana: June cost, $13,704; returns, $21,354.—Marmato, June cost, $13,043; returns, $14,828.—Purima for July: No profit and loss account received.

UNITED MEXICAN MINING ASSOCIATION.—Guanaxuato, July 27: Mine of Jesus Maria y Jose: The system of working partly with buscones has been pursued with advantage, and is still followed with satisfactory results. The most productive portions are worked in the usual way, and the produce sent to the haciendas. If the amount exceeds the 7/8 required for beneficiating—550 cargas per week—a part, being the best in quality, is sold. In the three months ending June the extraction by buscones has been 3449 cargas, which produced $14,373, by the usual means; 7564 cargas, of which 2550 cargas have been sold for $8595, and the rest sent to the haciendas. The total extraction, therefore, for the three months has been 11,013 cargas, and 5804 cargas have been sold for $22,968. The result of the operations at the mine for the same time is a gain of $4021·37, divided as follows:—$893·68 to the owners, $1340·52 to the liquidation of the debt, and $1787·37 to the profit and loss account of the association, the whole of their profit being $3127·89. In the present month (four weeks) 3585 cargas have been extracted, and 1854 cargas have been sold for $8851, of which $5478·4 is on the mine account, and $3372·4 has been paid to the buscones, and the rest of the cargas has been sent to the haciendas. The works going forward by buscones are the contracielo (roof), the frente, and the pozo of San Pantaleon; a work named Trinidad, on one side of the pozo of communication, a contracielo (roof), and two pozos of San Pedro; also a contracielo of Dolores, on the level of San Francisco. From these works about 350 cargas of good ore are obtained weekly. A frente, two pozos, and a contracielo of San Pablo contain ore of rather an inferior quality; in with from 1 to 2½ varas; these works produce about 80 cargas weekly, which are thrown down and cleaned at an agreed price of $1 per carga. By herramientos (day labourers) ore is extracted from the following works:—The pozo of San Alejo; the ore 5 varas wide, of tolerably good quality. The pozo of San Miguel; ore very good, 1 vara wide. The frente of Santa Victoria is not good as at first, the ore being divided by barren rock into three parts, one a vara wide, the others less. The frente of Santa Margarita; the yield considerably falling off. The pozo of Dolores gives good ore, but is divided into two portions, the one 2 varas, and the other 2½ varas wide. The frente of San Gabriel has been driven a considerable distance to the south-east, but has not realised the hopes entertained a month since; a cross-cut has also been driven to its lower wall, but very little ore has been met with. We have also driven forward the frentes of San Maximo and San Francisco, but with no good results.—Mine of Trinidad: Operations have not been resumed.—Quicksilver: 22½ quintals, not yet received, have just been purchased at $61, four months' credit. In use and in store, 9523 lbs. 8 ozs.

FORTUNA COMPANY.—Aug. 21: Canada Incosa, West of Engine-shaft: The 5th level, west of La Gloria winze, is worth 1 ton per fm. The lode in the 6th level, east of Addis's shaft, is disordered, and split up into small branches. The 5th level, west of San Provecho winze, is worth ⅛ ton per fm., lode large and hard, with ore spangled throughout. The 4th level, west of Kendall's winze, is at present poor and hard, but, from the appearance of the level above, we expect to have a change for the better. El Clavel winze is worth 6 tons per fm., lode from 2 to 3 ft. wide, composed of quartz and lead ore, and taking a more southerly underlie than we have seen it anywhere in the upper part of the mine.—East of Taylor's Engine-shaft: The 4th level, east of Garcia's winze, still continues hard. The lode in the 3d level, east of Kennedy's shaft, is more open and kindly than we have seen it for some time past, and contains a little ore, but not enough to value. The 2d level, east of Michell's winze, is worth 1¼ ton per fm.; this level is now communicated to Carros winze, and two pares of men set to stope the back. Carros shaft is down below surface; we have secured the run, and are now sinking again with good speed.—Los Salidos: The 3d level, west of Alirnas winze, is worth ½ ton per fm. The 3d level, east of Gabriel shaft, is worth 1¼ ton per fm.: the lode in this end is large, and promising further improvement. The 2d, east of Cologan's winze, is looking more kindly, and we are expecting to see a change for the better. Martinez winze is worth 1¼ ton per fm. Barrionnevos winze is worth ¾ ton per fm., at present a kindly looking lode. The lode at Morris's engine-shaft is standing on the north side, and has not been taken down since last report. Cologan's shaft is down to the 2d level, and we have now to drive a short cross-course to communicate to the same. The sinking of the new shaft, east of St. Pablo's shaft, is suspended for the present, and the masons are engaged collaring up and securing the top part of it. The tribute department is without any material alteration, and surface operations going on much as usual.

LINARES LEAD MINING COMPANY.—Aug. 21: Pozo Ancho Mine: West of Engine-shaft, on South Lode: The ground in the cross-cut in the 85 west is still very hard, and no appearance of the lode as yet. The 75, west of Carrillo's winze, is worth ¾ ton per fm. The lode in Warne's engine-shaft is a very large and promising one, worth 5 tons per fm. The 41, west of Warne's shaft, is worth 1 ton per fm. The lode in the 31, west of Cecillo's winze, is small and unproductive at present.—East of the Engine-shaft: The lode in the 85, east of Curba's winze, is very large, and of a very promising character, worth 1 ton per fm. The lode in the 75, east of Shaw's shaft, is large, and producing some good stones of ore, but not to value. The lode in the 65, east of Thorne's shaft, is regular, composed of granite, quartz, and particles of lead ore. The lode in the 65, west of Fernando's winze, is small and unproductive at present.—North Lode: The ground in the 65, east of Thorne's cross-cut, is very hard, and the lode small and unproductive. The lode in the 65, east of Taylor's shaft, is regular, and producing some good stones of ore, but not to value. The 65, west of Taylor's shaft, is worth ½ ton per fm. The lode in the 55, east of Gomez winze, is small, and is worth ½ ton per fm. The 55, on the south branch of the north lode, east of Gomez winze, is worth 3 tons per fm. The same level, west of ditto, is worth 2½ tons per fathom.—Field's Lode: The character of the lode in the 45, east of Field's shaft, has greatly improved of late, and is producing some good stones of ore. The ground in the 20, east of Field's shaft, is very hard, and the lode getting very small, worth ¼ ton per fathom. The 31, east of Field's shaft, and the 31, west of San Jose shaft, are communicated, and the latter has opened a good piece of tribute ground.—Winzes: The lode in Baiza winze is well defined, and worth 1½ ton per fm. Malaga winze is worth 1½ ton per fm. The lode in Guillermo's winze is large, and looking more promising; it is worth ¾ ton per fathom. San Juan winze is worth 2 tons per fm.; the lode is very compact. Madrid winze is worth 1½ ton per fm. The lode in Luis winze has got very small, producing some good stones of ore, but not to value. The lode in Linares winze is regular, composed of quartz, carbonate of lime, and particles of lead ore. Baptista's winze is worth 2 tons per fm. Basto's winze is worth 2½ tons per fm.; this winze is down to the 55, and we shall now cross-cut for the north part of the lode. The ground in Lupion's winze is hard, and the lode small and unproductive at present. The lode in San Enrique's winze is very small, composed of quartz, granite, and particles of lead ore. The lode in Loret's winze is split up in branches, and is unproductive. We shall now resume the sinking of San Jose shaft for a 45 fm. level, and then cross-cut north to intersect a very large and promising looking lode that was seen in an old shaft a few fathoms north of San Jose shaft, which is underlying south, and forms a junction with Field's lode a few fathoms east of Field's shaft. We are also making every necessary preparation for the sinking of Taylor's shaft for a 75 fm. level.

LUSITANIAN MINING COMPANY.—Aug. 17: Palhal Mine, Basto's Lode: The ground at Taylor's engine-shaft, sinking below the 38, was never harder than at present, being composed of hard quartz, gneiss, schist, and a floor of horn-stone, with a small stream of water, but very strong. The ground in the 38 cross-cut, driving south of Taylor's engine-shaft, is without alteration to notice. In the 38, driving north of Taylor's, we are still in the lode, which is composed of copper ore and quartz, it being very hard and wet, and the water is still very strong from the north; we have got into it about 3 feet in the furthest place. The lode in the 28, driving west of Taylor's engine-shaft, is 1½ foot wide, with a small branch of ore in it, worth ⅓ ton of ore per fathom. The lode in the 28, driving east of the same shaft, is 1½ foot wide, chiefly of spar spotted with ore. The lode in the 28, driving west of river shaft, is 1½ foot wide, composed of spar. The lode in the 28, driving east of river shaft, is 2 feet wide, composed of quartz and a little flookan in it. The lode in the rise above the 8, east of river shaft, is 1½ foot wide, producing some good stones of ore. The lode in the winze sinking below the adit level, east of river shaft, to come down on the rise before-named, is 2 feet wide, composed of quartz, with a small branch of good ore, worth one-third of a ton per fm. The lode in the adit level, driving south-west on the slide lode, is 1½ foot wide, consisting of the same composition as stated in our last, since which we have discovered two small branches, being parts of Basto's lode; the first being scarcely 1 inch wide, the second from 2 to 4 in. wide, each containing small quantities of oxide of copper. The lode in the stopes No. 2, in the back of the 18, west of Butler's winze, is 2 feet wide, worth 1½ ton per fathom. The stopes No. 3 are suspended, the ground being all taken away. The lode in the stopes No. 4, in the back of the 28, east of Fontouro's winze, is 1½ foot wide, worth 1½ ton per fm. The lode in the stopes No. 5, in the back of the 28, west of Fontouro's winze, is 2 feet wide, worth 2½ tons per fm. The lode in the stopes No. 6, in the back of the 28, east of Oleveira's winze, is 2 feet wide, worth 2 tons per fm. The lode in the stopes No. 7, in the back of the adit level, west of Taylor's engine-shaft, is 2 feet wide, worth 1 ton of ore per fm.—Mill Lode: The lode in the 18, driving east of the cross-cut, is 9 in. wide, composed of flookan and a branch of ore worth ⅛ ton per fm. The lode in the rise above the 18, west of the cross-cut, is 1½ foot wide, composed of copper ore, lead, and flookan, worth 1½ ton per fm.—House Lode: The lode in the 10, driving east of the old shaft, has not been taken down for the last ten days.—Oak Shaft: We expect the men will finish cutting the plat in the 20 next Friday or Saturday, after which they will drive a cross-cut south towards the House lode. We have finished with the costean pits, near Taylor's engine-shaft, and the men are removed 100 fathoms further west, to open on a branch in the direction of Basto's lode, but as yet we can say nothing about it. The cutting of the lode in the 38 has drained the bottom of the 28 quite dry to the west of the cross-cut, but not to the east; we shall, if possible, next week begin to sink a winze from the 28 to the 38.—Carvalhal Mine: The lode in the new adit level, driving east on the G lode, is in two branches, each being about 4 in. wide, composed of mundic.—Alhao's Lode: The lode in the adit level, driving west of the River Caima, is 6 feet wide, being composed of mundic, iron, quartz, prian, mica, flookan, and gossan.

ST. JOHN DEL REY COMPANY (LIMITED).—Advices from Brazil:—

Morro Velho, July 18.—The produce for June is 24,895 oits. = 239·165 lbs. troy, and is thus derived:—

	Oits.	Tons stone.	Oits. per ton.
From general stamps	18,437	from 5695·2 = 2·237	2·923
" Lyon (w. and m. cach.)	3,478	1714·4 = 2·028	
" Susanna (Gamba)	341	203·2 = 1·678	
" Arrastres	1,442		=0·189
	23,698	7612·8	3·112
" Praia	1,197	—	—
Total	24,895		

The produce for June, 24,895 oits. (less duty, 2 per cent., 498 oits.) = 24,397 oitavas, at 7s. 8d. per oit. £9352 3 8

The cost for June, rs. 79,727·769, exchange 2s. 1½d. 8471 1 4

Profit ..... £ 881 2 4

July 23.—Joseph Tonkin leaves here to-morrow morning (24th) for Rio, in charge of 10 boxes, containing 47,142 oits. gold = 452·892 lbs. troy, addressed to Messrs. W. Harrison and Co., with instructions to ship the same to your address should the rate of exchange on London be so low that the gold cannot be disposed of at Rio to the advantage of the company, which seems very probable.

July 31.—The troop accordingly did leave here on the 24th. Gold extracted to date, 10,936 oits., from 865·8 cubic feet of sand (result of 16 days' stamping), yielding 12·68 oits. per cubic foot; and from 4015·2 tons of stone, equal to 2·723 oits. per ton. It is with much regret that I have to notice this falling off again in the value of the stone, as compared with the first 20 days of June and the first 16 days of May, that for the latter having been at the rate of 2·853 oits. per ton, and that for the former 2·929 oits.

WILDBERG MINING COMPANY.—Z. Walls, Aug. 28: We have commenced sinking the new winze in the bottom of the deep adit level, on the Erbteilstergang lode, east of Carter's shaft, and I am glad to say that the lode will produce 3 tons of silver-lead ore per lachter. The end driving east on the same lode, in the 10 lachter level, will produce at present 25 cwts. of silver-lead ore per lachter, but we have about 7 lachters more to drive to reach the rich shoot of ore on which the new winze is sinking from the level above. The sinks and stopes on the Dornergang lode continue good; and the end driving west in the deep adit level from Michael's shaft is somewhat improved since last reported, being now worth 1 ton of silver-lead ore per lachter. I am also glad to say we have reached the hanging part of the Dornergang lode, in the 10 lachter level cross-cut, which is producing good saving work for silver-lead ore, but it will take full another week to cut through the lode so as to ascertain its value.

TOLTEC MINE.—H. Buzzo, July 31: This mine is opened by several shafts sunk on the course of the lodes. These lodes are known by name as the Farm and the Toltec. For the last six or seven years attention has been paid more particularly to the latter. These lodes cross each other a few feet west of the engine-shaft at surface, but owing to the easterly dip of the formation, which carries the junction of these lodes with it, the engine-shaft has intersected the junction at the 10. At the 30 this junction is a few feet east of the engine-shaft, leaving the shaft entirely on the Toltec lode, the Farm lode being a few feet south. The engine-shaft is now 10 ft. below the 40, and all necessary preparations are being made to sink to a 50, or deeper if deemed necessary: six shaftmen as a party are engaged for this work. The lode in present bottom of shaft is 2½ ft. wide, with well-defined walls, composed of spar, quartz, epidote, and heavily charged with rich stamps' copper. The latter is known here as profitable stuff for stamping, and through water processes is cleaned for market up to 66 or 80 per cent. for copper. Masses from the smallest to the largest size are generally cleaned by being burnt in a kiln, sufficiently hot to enable us to beat off all the rock possible with hammers, which will also produce from 68 to 80 per cent. of copper. From the inclination of these two lodes, and not being more than a few feet apart at the bottom of the mine, it is firmly believed that before reaching another level they will form a junction, which is among miners regarded as a true evidence of a very important point for mineral; hence the Minnesota Mine, below the junction of the conglouerate and north lode. Although they have found very heavy deposits of mess copper above, imbedded in the conglomerate, yet as a regular lode the mine is by far the richer below the junction. Considerable stoping has been done in this mine at the different levels, and masses of copper have been met with from the smallest size up to 15 tons weight. But looking at the relative position of the two lodes here described, and the trifling depth of the mine (40 fms. from surface, and an angle of 45°), it is deemed essential, and is determined on by the company, to arrive at a 50, or thereabouts; meanwhile we shall stope such points as will pay, and also carry on explorations at surface in search of other lodes which are known to exist. The company's property extends one mile in length on the course of the lodes. Our engine, which does all the pumping, hoisting, and stamping, is one constructed by Mr. N. Vivian, C.E., Pittsburgh. The cylinder is 17 in. diameter, and 5 ft. stroke, with a Cornish boiler 30 ft. long and 6 ft. wide, and tested to carry 95 lbs. of steam to the square inch. But with pump and hoist, or pump and stamp with 12 heads, with 20 lbs. to the inch. Our pitwork consists of one 30 fm. 6-in. plunger-lift, and one 10 fm. 6 in, drawing-lift. The latter we intend to use yet as a sinking lift.

CORNISH MINE PHOTOGRAPHS—SECOND SERIES.—No. III.

PORKELLIS MOOR MINES.

This place has obtained a melancholy celebrity, owing to the distressing accident of last week, by which seven persons lost their lives. Mishaps of this nature and extent are uncommon in Cornwall; though many men annually lose their lives in the hazardous employ of mining, seldom more than one or two work in immediate proximity of danger. This accident was wholly unforeseen, and arose from the ground falling in from the surface to a considerable depth, burying the levels and shafts, and, of course, destroying the poor fellows employed beneath. At the time of its occurrence upwards of 50 men were underground, and all who had the opportunity instinctively rushed to the surface, the noise, which they describe as being more terrific than the loudest thunder, having given them notice of some fearful mishap. They at first imagined it was an earthquake, their lights were at once extinguished, and the horrible idea of being buried alive flashed across their minds. These particulars we gained from one who was underground at the time, and who barely escaped that dreadful fate. The extent of surface gone down is about one-fourth to one-third of an acre, and is sunk 20 ft., as nearly as can be ascertained; the place now presents a deep pool of dirty water. To what extent the levels may be injured by the sludge and debris washed into them it is impossible to ascertain yet. So suddenly did the fall take place, that some girls at surface, who were working at the frames, narrowly escaped being buried. Some of the frames have gone down, and it is said several tons of tin, which had been prepared for the market, have been lost. Though every exertion will, of course, be made to recover the bodies of the unfortunate sufferers, some time must elapse ere that can be done. A large number of persons will be thrown out of employment. Fortunately three only of the men were married. The scene of distress and consternation is said to have beggared description, no one being able to form an idea of the extent to which the run might attain. The ground in the immediate locality is much shaken, and fears were entertained that the engines might be destroyed; fortunately this is not the case, but, in all probability, it will entail the stoppage of this part of the mine. The fall is within a few feet of the high road, from Wendron to Porkellis villages, and it is a fortunate circumstance the road was not destroyed. The accident being the absorbing topic, we give these particulars previously to describing the situation and evident cause of the misfortune.

The Porkellis Moor has been worked as a stream work from time immemorial, and has been celebrated for the quantity of tin ore it has afforded—said to amount to millions in value; certain it is the vestiges of ancient extensive operations which abound, the old burrows and pits, extending for miles, attest it. Tradition gives a report of a small village near Helston having been the port where the Phœnicians traded with their small vessels for the much-prized mineral. Numerous granite millstones and mortars for pounding and grinding the ores have been met with by modern workers, some of which are of curious contrivance, and all bear the marks of long and severe attrition. Small parcels of tin ore, left by the "old men," are not unfrequent; and "jew's houses" (places where they melted their tin) have been observed. At a place called Trenear there is a curious building, evidently of very ancient construction, underground; it is built of well-wrought granite, and consists of three low rooms, the outer is about 12 ft. by 9 ft., the inner somewhat larger; in the former are niches constructed in the wall for some purpose not apparent, and there are no chimneys, from which it is inferred that it could not have been occupied as a dwelling. A large number of mills have been found in close proximity; these and the tradition would seem to give colour to the idea. Why the building should have been placed underground seems a mystery. It has been suggested this was done to protect the stores from the marauding bands who at that period infested the British shores; be that as it may, the building is still there for the examination of the curious, and is well worthy a visit by archæologists.

The ancients appear to have wrought the tin streams on horizontal deposits, as this is the manner adopted on Tregoss Moor, Carnon, Nancothan, and other streams. There are, however, numerous lodes at Porkellis, which are productive of tin at the very surface; on reaching these, they sunk as far on them as the influx of water would permit, and for considerable distances on the course of the lodes. Similar works may be seen at the Kellyer's stream, near Halloon. These are exceptions, and not the rule. These "tinners' hutches," as they are termed, are generally large pools of water,—the drainage of the surface and rain falls,—and are very dangerous places. The Porkellis Moor is full of them, and they are sources of great inconvenience to the regular miner. The ground, too, is of a loose character, being growan or decomposed granite, some part of which, known as the great clay, is so highly dangerous as to deter workmen until the mine is thoroughly drained by having numerous levels. Lying in a pan of ground, or nearly a dead level, and surrounded by hills, it is not surprising that the accumulations of water are excessive, and require powerful engines for drainage. The cause of the disaster is, no doubt, the tributers having exhausted the veins and backs, until the ground left was too weak to bear the superincumbent weight; or that the timber put in for safety was insufficient in strength. This is a very delicate question, the grown having the quality of swelling when exposed to the atmosphere—this is called by the miners "plumming." To such a degree in some mines is this the case, that what in one week would be deemed perfectly safe, in the next might be highly dangerous. This we particularly noticed at the Wendron Consols Mine, adjoining Porkellis, where, however, ample precautions had been taken. The moors may be said to be one continual series of lodes, running nearly east and west. Besides the two mines mentioned, are Wheal Ruby, Caledra, Wheal Foster, and others not at work.

The present company have expended many thousands of pounds in developing the mine and erecting efficient machinery, and were in sanguine hopes of reaping the reward of their spirited outlay, when this untoward event has prostrated their efforts for a time. We sincerely hope, however, that their loss will be found much less than anticipated, and that they, like the Atlantic Telegraph Company, will not allow one mishap to damp their endeavours, but that they will have the magnanimity to rise superior to their misfortune, and by perseverance yet reach the goal of their exertions, to their own honour and profit. All concurrent testimony is in favour of the Porkellis making a good mine, as well as its neighbours, who have paid dividends, and are now in an excellent position. Had not this fearful calamity befallen them, it is highly probable the Porkellis would have been a dividend mine ere long. We hope yet to see it in that position, by practising a little energy, patience, and capital. GEO. HENWOOD.

Mining Correspondence.

BRITISH MINES.

ABBEY CONSOLS.—J. Trewin, Aug. 30: The lode at the eastern-shaft is much the same as stated in my last report, producing 8 cwts. of lead per fathom, and is of the same promising character. The stopes in the back of the 10 are improved, now worth 12 cwts. of lead per fathom. No change worthy of notice in the winze in the bottom of the adit, west of the said shaft. The winze in the bottom of the adit, west of the engine-shaft, being deep enough for the present is suspended. The stopes in the back of the adit, west of the engine-shaft, are worth 7 cwts. of lead per fathom. We have the axle referred to in my last report on the pit, and the carpenters are putting the wheel together as fast as they possibly can. The masons are getting on with the walling for the new drawing machine with all speed. We have had the last week some showers of rain, which have enabled us to put the pumping-wheel to work, and the water is forking satisfactorily. We have not sufficient water to draw and crush as yet.

ALFRED CONSOLS.—T. Trelease, T. Hosking, Sept. 1: No change to notice in any of our operations west of flookan since our last report. The north lode in the 140, east of flookan, is 6 inches wide, producing little ore, but not to value; the main lode in this level, east of flookan, is 4 feet wide, producing good stones of ore, with a more promising appearance. No lode is yet intersected in the 130 cross-cut south. The main lode at Davey's engine-shaft, sinking below the 120, is 5 ft. wide, containing good stones of ore; the lode in the 120, east of said shaft, is worth 8*l.* per fm. The lode in the 110, east of the above shaft, is worth from 8*l.* to 10*l.* per fathom. The south branch in No. 1 winze, sinking below the 100, is worth 15*l.* per fathom. The new north lode, east of flookan, is worth 5*l.* per fm., a very promising looking lode.

ASHBURTON UNITED.—W. Hosking, Sept. 1: Since my report for the general meeting on Aug. 18, all the works on the mine have continued to be carried on with the greatest possible speed. The engineers are fast approaching towards completing the erection of the engine. We have excavated ground for new wheel-pit, where we intend to erect another wheel for stamping, of 20 ft. diameter, with 12 heads of stamps attached, and expect to be able to commence the masonry work of the same next week. The clearing of the adit level in the western part of the mine is favourably progressing. I have set the engine-shaft on Brother's copper lode to open, and well secure with timber from surface to adit level, to six men, at 25*s.* per fathom. The tributers in adit level, on Brother's lode, continue to break some good copper ore, and we have hauled a pile to surface, estimated to be about 10 tons, of good quality. The tin pitches in the eastern part of the mine, on Union lode, are still continuing to yield good work. We have now altogether at surface a large pile of tinstuff prepared for the stamps; this, with what we have already stamped, will produce 16 tons of black tin.

BALLYMONEEN.—W. Barkla, Aug. 28: This being our usual day for setting, and having made an arrangement with Capt. Evans that he should inform me what to set, and as he has not given me instructions, I have postponed the setting until Monday morning. The winze in the 15, sunk since last report 2 feet, total 10 fathoms, which is the required depth to commence to drive. The adit level, driving east, is producing stones of sulphur, and the ground looking easier for driving, driven since last report 1 fm. 1 ft., total 38 fms. 5 ft. The adit cross-cut north is without any change worthy of notice, the ground still in an unsettled state, driven since last report 1 fm. 3 feet 8 in., total 3 fathoms 0 feet 6 inches.

BALLYVIRGIN.—D. Macdonald, R. Pellow, Aug. 26: We have put 2½ tons of lead, 1 ton of copper, and 5 tons of mundic to pile since last report, and prepared 2 tons of lead for crushing.

BEDFORD CONSOLS.—J. Mitchell, Sept. 2: In the middle adit level the lode is 4 ft. wide, composed of spar, peach, quartz, mundic, capel, and a little saving work for copper for about half-way up the end; the country by the side of the lode is full of branches of spar, mundic, and ore dropping into the lode as they go down, and letting out water; the end altogether is looking very promising for further improvement.

BOILING WELL.—J. Delbridge, Aug. 28: At the engine-shaft, sinking below the 60 fm. level, the ground is favourable; the lode is 3 ft. wide, yielding lead, blende, and stones of copper ore, but not enough to value. In the 60 west the lode is 5 ft. wide, yielding stones of lead; in the 60 east we are cross-cutting to cut the north part of the lode. In the 50 fm. level east the lode is 15 in. wide, yielding blende and stones of lead—tribute ground. In the 40 fm. level, east of Austin's, the lode is 15 in. wide, tribute ground. In the 30, west of Syrett's, the lode is 14 in. wide, yielding stones of copper ore. In the 20, east of ditto, the lode is 14 in. wide, yielding a little lead, not to value. In the 20 cross-cut, towards the south lode, west of Austin's, there is no change—ground easy for driving. In the 20 rise, west of ditto, tribute ground. The stopes in the back of the 50, east of King's, are opening tribute ground. Austin's shaft is sunk 1½ fm. below the 40. We have cut the cistern-plat, and put in the bearers and cistern to-day; we hope on Thursday morning to commence putting down the H-piece door, and we calculate on working Austin's engine on Saturday with good speed. Our tribute much as last week.

BRONFLOYD (Limited.)—M. Barbary, Sept. 1: Setting for Sept.: No. 1 stope, in back of deep adit, 8 fms. west of No. 2 shaft, by four men, 8 fms., or the month. No. 2 stope, west of James's rise, by six men, 10 fms., or the month. No. 3 stope, east of said rise, by two men, 4 fms., or the month, all at 50*s.* per fathom, the yield on an average being full ⅛ ton of lead ore per fathom, or 1 ton for the whole breadth of the lode, being stoping ground for 13 ft. wide. The 17, to drive south to intersect south lode, 1 fathom, at 3*l.*; I consider we are very near the lode. In the same level, east of cross-cut, by two men, 1 fm., at 6*l.*, yielding ½ per fathom. To stope over this level, by four men, 8 fms., or the month, at 2*l.* 15*s.* per fathom, yielding also ½ ton per fathom. To rise in back of this level, west of cross-cut, by six men, 5 fms., or the month, at 4*l.* 10*s.* per fathom; the lode in this rise is of a very promising character, yielding full 1 ton of ore per fathom. We have suspended the 17, west of cross-cut, for a week, to clear the staff. Our dressing and all other surface operations are progressing favourably, and we shall this day ship 20 tons of ore at Aberystwith for Messrs. Sims, Willyams, Nevil, and Co

BRYNTAIL.—J. Roach, Sept. 2: The cross-cut driving north from perpendicular shaft, to intersect the lode at the 25, is progressing favourably; total driven, 12 fms. 5 ft. 6 in. The lode in the 10 fm. level east, which is being driven in the middle, is of a very promising character, and produces detached stones of solid ore, together with a mixture of the latter throughout the level; therefore the indications justify the anticipations of good results in the 25. I have no doubt but that all the ground driven through east of the cross-cut on Bryntail lode will pay for stoping; but in order to make it available, we must first effect communications between the two levels.

BULLER AND BASSET UNITED.—G. Reynolds, Aug. 30: On Saturday last I set the shaft to sink, by six men and three boys, at 25*l.* per fathom; the shaft is now sunk 10 fms. 4 ft. below the 50; the lode still continues large, with a regular underlie, and is composed of a congenial spar, peach, and mundic, of a most promising nature, with spots of copper ore throughout the lode. To drive west, by two men, at 7*l.* 10*s.* per fathom; the lode in the end is 5 feet wide, mixed with mundic and spots of ore throughout, and in depth we may reasonably expect a very productive one. The engine and pitwork is working well.

BULLER AND BERTHA.—W. Goss, Sept. 2: The lode in the 10 end, driving east of engine-shaft, is maintaining its size, being 3 to 4 ft. wide, and producing some good spots and stones of ore, with easy ground for driving. I intend to drive one month longer, as the further east the end is extended the more promising is the lode. You will be able to judge something of its character from the box of ore sent up.

CAMBORNE CONSOLS.—W. Roberts, Aug. 31: Nothing new in the tutwork bargains since last reported. The tribute pitch in the back of the 20 is producing good ore.

CARADON CONSOLS.—Wm. Rich, Sept. 1: The sinking of Thomasini's shaft is being proceeded with as fast as possible. There is no alteration in the general prospects of the mine since last report.

CARDIGAN CONSOLS.—James Sanders, Aug. 31: There is no particular change to notice in any of the tutwork bargains or tribute pitches since my last report. But during the past week a cross-cut has been set to drive north 15 fms. west of the engine-shaft by four men, at 8*l.* per fm. We shall commence in a day or two to drive a cross-cut south from the same level, 70 fms. west of the engine-shaft. We have had some rain, and the water is in fork in the 20, and our dressing operations are going on favourably.

CARDIGAN SOUTH BOG.—J. Kemp, Sept. 1: No alteration to notice.

CARMARTHEN UNITED.—R. Sanders, Aug. 31: During the past month we have sunk Harrison's engine-shaft 2 fms. 1 ft. 3 in., through a lode which has produced about ¾ ton per fm. The lode in the bottom of the shaft at present is 6 ft. wide, and will produce full ¾ ton per fm. The 12 north has been driven 2 fms. 5 ft. 6 in., the last 2 fms. of which has produced some good saving work for lead; but, owing to the closeness of the air, I was obliged to suspend this end for a short time, and the men have been engaged in rising in back of the same level, to hole to a winze for ventilation, and have risen 2 fms. 5 ft. 3 in., which has also produced some saving work for lead. We have about 3 fms. more to rise to hole, which will be done as quickly as possible. The cross-cut has been extended 5 fms. 2 ft. 9 in.; and since we intersected the flookan lode mentioned in mine of the 17th the ground has been hard and troublesome for working; consequently, our progress has not been so fast as I anticipated. The ground in the end is still hard, and bursting with water from every pore, which has increased our water so much that we have been obliged to put our engine to work at a longer stroke. According to the dialling, we have from 2½ to 3 fms. more to drive to cut the lode; but, by the appearance of the water coming from the end, I should not think the lode to be so far distant. Last Saturday being our pay and setting-day the following bargains were set:—Harrison's engine-shaft to sink below the 12 by nine men, 3 fms., at 11*l.* per fm.; to rise in back of the 12 by six men, 3 fms. or hole, at 3*l.* 3*s.* per fm.; the cross-cut to drive west by four men, 2 fms. or cut the lode, at 5*l.* 15*s.* per fm.

CARVANNALL.—Wm. Roberts, Aug. 31: In the 130 west the lode is 2½ ft. wide, producing iron, prian, and occasional stones of ore. In the winze in the bottom of the 118 the lode is 1½ ft. wide, producing 1 ton of ore per fm. Other parts continue much the same as last reported.

CARVATH UNITED.—R. Hancock, Aug. 31: The 50, west of the engine-shaft, is not so good as it has been, but I hope this will not last long. The stope in the back of this level is producing some good work, but the lode is not so large as it was, so it will not turn out so much tinstuff. I have put three of the men from the bottom end to drive the 40 end, so they are working single-handed—three in the 50, and three in the 40—so we can do more work with the same number of men. The 40 end is tin, but not rich at present, but it is kindly, and well worthy of driving, for we have a long piece of ground on the course of the lode west of this end all in virgin ground. We are carrying on all operations as well as we can for the benefit of the adventurers, and all of the machinery is working well throughout the mine.

CATHERINE AND JANE CONSOLS.—R. Harry: Our monthly setting took place on Saturday last, when the following bargains were set:—The deep adit end to drive north-west by four men, at 100*s.* per fathom; the lode is 1 ft. wide, producing good stones of ore. I have put two of the men to cross-cut a few feet in the north side of this level, 8 feet behind the end, to ascertain if there be any other part of the lode in that direction. The stopes north-west of No. 4 winze, by four men, at 40*s.* per fathom; the lode here still maintains its size, 2 feet wide, and worth 10 cwts. of ore per fathom. The stopes north-west of the rise, by two men, at 60*s.* per fathom; the lode is a little improved, worth at present 12 cwts. of ore per fathom. The stopes south-east of No. 3 winze, by four men, at 60*s.* per fathom, lode yielding from 10 to 12 cwts. of ore per fm. The deep adit end to drive east on the cross-branch, by four men, at 120*s.* per fathom; the branch is very much improved in the past week, and is now worth 1 ton of good ore per fathom. The middle adit end to drive north-west, by two men and one boy, at 70*s.* per fathom; the part of the lode on which we are driving is 8 in. wide, producing good lumps of lead, and showing signs of improvement. On the whole, I consider our prospects are encouraging.

CHOLLACOTT CONSOLS.—J. Carpenter, Sept. 2: The men have completed their 70*l.* bargain, by sinking the engine-shaft to the depth of 20 fms. I have again set them

to make it 5 fms. deeper, sink for a fork, divide and case the shaft, put in sollar, and to do all the preparatory work necessary to commence driving the cross-cuts north and south towards the lodes, for the sum of 50*l.*; this work I expect will be performed by Oct. 9. The stratum is a blue killas much mineralised, and the water has become a little quicker, but not to impede or make it much more expensive in the consumption of coal for our engine, as it works very steadily, and consuming about 2 tons of coal per week.

CEFN BRWYNO.—Sept. 1: No change of importance has occurred in any part of this mine since my last report, but little or nothing has been done in the 80 or 68 fm. levels during the last fortnight, in consequence of the water being in by means of the long continuation of dry weather, which has very much impeded our drawing and dressing also, but we are now in full work again. The lode in the 56, or deep adit level end, going east of Taylor's shaft, is 3 ft. wide, yielding 12 cwts. of ore per fm. The lode in the stope over the 68 fm. level, and 70 fms. west of Taylor's shaft, is 5 ft. wide, yielding 15 cwts. of ore per fathom. The stope over the same, 50 fms. west of shaft, is yielding 14 cwts. of ore per fm. The lode in the stopes over the same level, 25 fms. east of shaft, is 3 ft. wide, producing 12 cwts. of ore per fm. The stope over the same, 15 fms. east of shaft, is yielding 13 cwts. of lead ore and 8 cwts. of blende per fm. The stope over the same level, 10 fms. east of shaft, is yielding 10 cwts. of lead ore and 10 cwts. of blende per fm. The lode in the stope over the 56 fm. level, 40 fms. east of Taylor's shaft, is 3 ft. wide, yielding 1 ton of ore per fm. The lode in the stope over this level, 40 fms. west of shaft, is 4 ft. wide, and will yield at present 12 cwts. of ore per fm. The stope over the same, 50 fms. west of shaft, is producing 10 cwts. of ore per fathom. The lode in the stope over the 44 fm. level, 70 fms. west of Taylor's shaft, is 3 ft. wide, yielding at present 14 cwts. of ore per fm. The stope over this level, 25 fms. east of Taylor's shaft, is producing about 8 cwts. of ore per fm. There is nothing of importance being met with as yet in the cross-cut north from the 20 fm. level, east of Taylor's shaft, but the ground looks kindly, and there is still a good deal of water coming out of the present end, and we must drive a few fathoms further at this point, in order to properly prove the north ground. The dressing, &c., with all other things here, are now all going on regular, and the water will be in fork again in the 80 fm. level by about the end of this week, when every point will be pushed on with all possible speed.

CLIJAH AND WENTWORTH.—C. Glasson, August 31: At Walter's engine-shaft, sinking under the 90 fm. level, the lode is 2 ft. wide, but unproductive. In the 90, driving east of shaft, the lode is 2 ft. wide, kindly in appearance, but at present unproductive. In the 80, on the south lode, driving west of cross-cut, the lode as it leaves the cross-course is improving in appearance. In the 70, on Wentworth lode, driving west of shaft, the lode is at present poor. In the 50, on Julia lode, driving west of Mary Ann cross-course, the lode at present is small and poor. We have not met with anything worthy of notice in the 80 cross-cut or 30 cross-cut since our last report.

COLLACOMBE.—S. Mitchell, Aug. 31: During the last month the 84, west of Morris's engine-shaft, has been driven 6 fms. 4 ft. 6 in., and the lode greatly improved (being composed of quartz, prian, and rich copper ore), producing good saving work. The driving of this level, however, is discontinued at present to admit of putting up a rise to the 72 for ventilation. The rise in the back of the 72 has been holed; the lode where cut into is worth 1 ton and 1½ ton of rich ore per fm. The stope in the back of the 52 west is still worth 2 tons of rich ore per fm. There is no material alteration to notice in any other part: 181 tons of good quality copper ore were sampled on Friday last. The following bargains were set on Saturday:—The rise to put up in the back of the 84, west of Morris's shaft, at 2*l.* 15*s.* per fm. The 62 to drive west of the western shaft, at 2*l.* 5*s.* per fm. The 50 cross-cut to drive south of Morris's shaft, at 2*l.* 17*s.* 6*d.* per fm. The 40 to drive east of Morris's shaft at 3*l.* per fm. All kibbie filling and landing in this mine for two months at 20*l.* per month. All the trumming in this mine for two months at 13*l.* 5*s.* per month.

COLLEGE.—A. Braithwaite, T. Murray, August 30: We have had a continuation of dry weather, which causes a heavy item in our expenditure. The stopes at the run shaft have become very poor, without any disturbing cause; the lode keeps much the same in appearance; we have now set the work on tribute, to four men, at 6*l.* per ton. We have also set the backs and bottoms of the 20, north of the engine-shaft, on the red lode, to four men, at 6*l.* per ton; also the back of the 10 south, to two men at 6*l.* per ton; also the bottom of the 10, south of the engine-shaft, on the red lode, to two men, at 6*l.* per ton.

CROWNDALE.—J. Richards, Sept. 2: Nothing new worthy of communication.

CWM SEBON.—J. Boundy, Aug. 31: The following bargains were let on Saturday last:—The 70 end to drive west of engine-shaft, by six men, at 8*l.* 10*s.* per fathom; the lode in this end is still split up into branches, and poor at present. The 70 end to drive east of shaft, by six men, at 7*l.* 10*s.* per fathom; the lode here is about 2 ft. wide, and worth for lead 5 cwts. per fathom. A winze to sink below the 60, west of engine-shaft, by four men, at 8*l.* per fathom; the lode is worth for lead 7 cwts. per fathom. A winze to sink below the 60, east of shaft, by four men, at 6*l.* 10*s.* per fathom; no lode has been taken down in this winze. In the 60 end east nothing has been done during the past month, in consequence of the stuff which has been broken from the end, and not having sufficient water to take it away; I hope to get this end cleared out in the course of a few days, when I shall put the men to open on the north part of the lode. No. 1 stope, in the back of the 60, east of engine-shaft, by four men, at 63*s.* per fathom. No 2 stope, in the back of ditto, by four men, at 63*s.* per fathom; the lode in these stopes continues to yield the usual quantity of ore. The 30 cross-cut north, east of engine-shaft, by two men, at 100*s.* per fathom; no lode has been met with during the past month. In the 20 cross-cut south the men not having finished their contract, consequently their end was not let. There is nothing new to notice in the tribute department. We have been so short of water of late that we have been able to do but very little towards the dressing, but we are pushing on as fast as possible.

DALE.—R. Niness, Sept. 2: The winze will be fully 6 fms. below the 37 by the end of the week, and shall commence driving towards the Pipe vein as soon as the sinking is accomplished. The 26, going north towards the Lum, is much the same. The 20 east, on Johnson's lode, is improved, and the stopes in back of this level are yielding good ore.

DEVON AND CORNWALL UNITED.—T. Neill, Aug. 31: I have nothing particularly new to advise you on in the operations in these mines since the general report for the meeting of last week. The lode in the adit level, at William and Mary, is a little improved, and the new shaft will be commenced the latter part of this week.

DEVON BURRA BURRA.—John Lord, Sept. 2: In the 40, driving east, the cross-course is very hard and wet; driven last month 1 fm. 3 ft. 3 in.; re-set last Saturday to six men, 1 fathom, at 15*l.* We are still raising good stones of grey ore in the drivage at White's shaft; driven last month 8 fathoms; taken last Saturday by four men, at 2*l.* per fathom, 6 fms. stent. The engine and pitwork are in good working order.

DEVON GREAT ELIZABETH.—Report of Patrick Buchan, M.E., Aug. 18: According to arrangement, I went to Totness on Monday, the 16th inst., and next morning, having picked up Capt. Williams on my way, visited and inspected this mine; it is a portion of a very extensive sett, comprising almost the whole of the parish of Widdicombe, is most favourably placed as regards geological indications of metalliferous wealth, and inexpensive means of turning that wealth into profitable account. Bounding the "pan" somewhat in the form of a crescent, the gigantic range of Dartmoor stretches from the west to east, and is traversed by elvan courses, and on the east by a great trap dyke. The stratification in which the lodes are situated is light blue killas. The operations which have been already carried out, although valuable as to proving the quality and prospects of the mine itself, are not of so advanced a nature as to enable any one to assure you that this mine is another Devon Consols, and that you must, of course, reap incalculable returns for your adventure. No such decided opinion can be pronounced; but most assuredly the prospects, so far as I have been enabled to judge, are of a very flattering description indeed. The lode runs nearly east and west, with a very gentle southerly underlie, is accompanied by parallel lodes, and affected by cross-courses, one of which has thrown the main lode several feet further from the River Dart into the mining ground, and, of course, favourable to the operations of the company. Several openings have been made on the main lode, both to prove its quality and test its underlie, quite sufficient, in my opinion, for both important objects. The first, an open cutting, commencing at the River Dart, and running for about 9 fms. along the lode, shows it to be increasing in width from 5 to 8 feet, with well-defined walls, and has yielded a few tons of ore, affording very valuable indications of what may be, with every degree of hope, expected from deeper operations. The last opening made on the lode does not belie the promises of the first. From both a quantity of rough ore has been raised; of this about 8 or 10 tons have been dressed, and looks well, and about as much remains as may yield 15 tons more of dressed ore, when the means of crushing are provided. The lithographic sketch gives you an excellent and correct idea of the locality, and shows the favourable means of working contained in the arrangement of the ground, and the unfailing supply of water from the River Dart. No steam-engine can ever be required; such an idea would be madness. The contiguity of large plantations affords a cheap and handy supply of wood for timbering and other purposes; no small item in mining calculations, I can assure you. To sum up my opinions as shortly as possible, I think very highly indeed of the property, for the following reasons:—1. The district, geologically, indicates the existence of metalliferous deposits.—2. The main lode, where it has been exposed, and where I could examine it for the water contained in the several pits, is well defined; the matrix good, though disturbed somewhat by the cross-courses, and, therefore, more troublesome to work. These are far from unwelcome intruders, affording, as they do, evidences of most valuable copper bunches, their almost universal concomitants.—3. Taken, as it has been, from the upper part of the lode, the sample raised is very good, and gives one a certainty (so far as any can be obtained in mining) of a very much more valuable return at a greater depth.—4. The natural advantages for working contained in the arrangement of the surface, the supply of water-power and of timber are of immense value.—5. The distance to be sunk by a shaft is comparatively small, and, therefore, with energy and perseverance the returns ought to be quick and great. The only disadvantage which I can foresee is the great run of water which must take place into the shaft; but which due consideration in putting the shaft, the supply of proper sound pumps and power, in the commencement, will overcome. Every shilling of expense ought to be saved, except what is necessary for the erection of the water-wheel, crushing machinery, &c., and in sinking the shaft to a proper level before the mining operations in their integrity are commenced. During the sinking mineral to some extent will be brought to grass, affording a considerable portion of the outlay in return; but, in my opinion, it would be injudicious to commence a level under 20 fms. in depth, and unwise to look for those highly profitable returns which the appearances indicate at an earlier stage of the mining operations in less than six or seven months hence. No more openings should be made, sufficient has been done to prove it thoroughly. No ore should be sold; small sales ruin the name of a mine, and all that can be realised at present is not worth taking into consideration, when opposed to the disadvantages it entails; a small amount of call would enable the proprietors to hold it until a proper quantity can be disposed of.

DEVON WHEAL BULLER.—F. Bennetts, jun., Sept. 1: The 56, west of engine-shaft, has improved during the past week, the lode is from 15 to 18 in. wide, and yields a little saving work. There is no alteration to report in the ends that are driving. The stopes in the back of the 32 east will yield about ½ ton per fm. In a winze sinking in the bottom of the 32, west of engine-shaft, the lode is from 20 in. to 2 ft. wide, and will yield about 2 tons of ore per fm.

DRAKE WALLS.—T. Gregory, Sept. 2: The 70 stopes, west of Betteley's, towards Brunton's shaft, has occasionally improved, and is now producing good saving work. We are informed as we extend west towards the great cross-course the branches are more productive. In the 70 east, during the past week, the branches have produced some good work. The branches in the 60 are in a more settled state, and producing better work. We are cross-cutting through the copper lode, which is producing more quartz, with a little copper ore, but not sufficient to value. We have no change to change to notice in any other part of the mine.

EAST CARN BREA.—T. Glanville, Sept. 1: There is nothing new to report.

EAST ROSEWARNE.—J. James, Aug. 28: In the 43 cross-cut, south of engine-shaft, the ground is hard for driving, and the water issuing freely, indicating a lode at no great distance. In the 33, west of Mathewa's shaft, the lode is still in several parts impregnated with copper, but not to value. In the 22, west of Hanley's, on Brook south lode, the lode is small and poor; we have suspended this end until we prove the value of the lode in the 43. In the 22, east of Mathew's north lode, the lode is from 9 in. to 1 ft. wide, composed of mundic, spar, and copper ore; a very kindly lode, and good tribute ground. In the winze sinking below the 12, on same lode, the lode is 6 in. wide, with good stones of ore. At Hallett's shaft the ground is moderate for sinking. Our tribute department is without change to notice.

EAST TAMAR CONSOLS.—G. E. Tremayne, August 31: The lode at the engine-shaft is improved, being 3 feet wide, composed of fluor-spar, horn-spar, and lead, of the latter yielding 15 cwts. per fathom; the shaft is 3 fms. 1 ft. under the 40. The 40 north is stopped, and the men put to rise, where the lode is 3 feet wide, and worth 6 cwts. of lead per fathom. In the 40 south the lode is 3 feet wide, and producing 8 ewts. of lead per fm.; there are three stopes in the back of this level, each of which produce 6 cwts. of lead per fathom. The lode in the 20 north is 2 feet wide, composed of horn-spar and fluor-spar, with a little lead. The two stopes in the adit level yield 8 and 9 cwts. of lead per fathom.

EAST WHEAL FALMOUTH.—W. Hancock, Aug. 31: The 30 fm. level south will produce 12 cwts. of lead per fm. The rise over this level, north of Tyack's lode, will produce 9 cwts. of lead and 5 cwts. of jack per fm. We have about 6 ft. more to rise to communicate it with the winze in the bottom of the 20, where the lode will produce 1 ton of lead and 10 cwts. of jack per fm. The stopes in the bottom of the 20 fm. level, on Chennall's lode, will produce 5 cwts. of lead and 3 cwts. of jack per fm. The 20 west, on Chennall's lode, is producing good stones of lead and jack, saving work, and improving. I hope by this time next week to see a better lode in this end to report on. Annexed are our tutwork settings for September month, and the carriage of all materials, ores, and whim-drawing that may be required until the end of June, 1859.—Tutwork Setting: The 30 to drive south by six men, 2 fms., at 16*0s.* per fm. A rise in the back of the said level by eight men, 1 fm. or hole, at 16*0s.* per fm. To sink and stope in the bottom of the 20, over the rise, by six men, 4 fms., at 15*s.* per fm. To stope the bottom of the 20, on Chennall's lode, by two men and two boys, 2 fms., at 15*s.* per fm.; and to drive the 20 west, on the latter lode, by three men and three boys, 2 fms., at 12*0s.* per fm. All the wheeling, filling, and landing for the month at 16*0s.* All the carriage of materials from Truro to the mine for the time above mentioned at 2*s.* 6*d.* per ton. The carriage of all the ores that may be required to Truro at 3*s.* 6*d.* per ton. The carriage of all the ores to point, or Devoran, at 4*s.* per ton. All the whim-drawing that may be required for the time above-mentioned from the different levels as follows:—From the 20 fm. level, 8*s.* per 100 kibbles; ditto the 30 fm. level, 6*s.*; and so on for every 10 fms. below.

EAST WHEAL RUSSELL.—J. Goldsworthy, Sept. 2: The ground in the 88 is somewhat more spar for driving than when last reported; the part of the lode carrying is about 1 ft. wide, of a promising character, and producing a little copper ore, but not to value. Homersham's shaft is sunk about 18 fathoms below the 66; ground rather spare for progress. The ground in the 66 is a little improved for driving; the lode is stripped down, which is about 3 ft. wide, and composed of capel, quartz, prian, mundic, and good stones of copper ore—a very promising lode. We are making good progress in clearing the 45, east of the Tunnel level. The tribute pitches are without any change to notice since my last report.

EAST WHEAL TOLGUS.—Aug. 28: In the 46, east of the engine-shaft, the lode is 10 in. wide, but unproductive. In the 34, east of engine-shaft, the lode is 5½ ft. wide, composed of peach and spar, with stones of tin and copper ore; we are still cutting through the lode. In the 22, east of John's incline shaft, the lode is 2 feet wide, composed of mundic, jack, spar, and stones of ore—a kindly lode. In the 12, east of John's incline shaft, the lode is 2½ feet wide, composed of peach, spar, and good stones of ore. In the 12 south, from the caunter lode, the ground is still hard. In the adit end east, on the north lode, the lode is in two parts, with 2½ feet of killas between, and each part 4 in. wide; the south part produces good stones of ore. In the stope in the bottom of the 22, east of the engine-shaft, the lode is 2 feet wide, yielding 2½ tons of ore per fm. In the stope in the back of the 12, west of John's incline shaft, the lode is 18 in. wide, yielding 2 tons of ore per fm. In the stope in the back of the 12, east of incline shaft, the lode is 4 feet wide, yielding 6 tons of ore per fm. We have taken the two men from the suspended stope in the bottom of the 22 east, and put them with the men in the stope east of John's incline shaft, in the 12.

GARREG.—J. Trevethan, Sept. 2: The lode in the shaft sinking from surface is 3 ft. wide, composed of carbonate of lime and clay of a cheerful character, and producing occasionally good stones of lead; this shaft is sinking at 3*l.* per fm.

GERNICK.—J. Barratt, Aug. 31: Since my last there is no alteration in the appearance of Gernick lode. In the 36 end, being driven east from flat-rod shaft, we have just intersected in this end a vein coming in from the south-west 2 in. wide, composed of blende, mica, quartz, and mundic. Our setting took place on Saturday last, when the 36 end was taken by six men, at 11*l.* 10*s.* per fm., for 2 fms.

GOGINAN.—Sept. 1: The lode in the winze sinking below the 60, or deep adit level, 40 fms. west of Bryn-pica shaft, is large, and the part we are sinking upon is yielding 1 ton of ore per fm. This winze is now down about 5 fms. below the level. The lode in the winze sinking below the same level, about 80 fms. west of Bryn-pica shaft, is 3 ft. wide, and will yield at present full 1 ton 5 cwts. of lead ore per fm. This winze is now sunk about 8 fms. below the 60, and has gone down through a very promising lode, and I hope we shall be deep enough by the end of this month for a 10 fm. level, which will enable us to push on east and west from the winze, in order to prove the lode at that depth, where I think we shall open out some pretty good ore ground. There is no alteration in the cross-cut driving south from the 60 fm. level, 40 fms. west of Bryn-pica's shaft, except that the ground is still a little easy for driving, and there is still a little water coming out of the present end. The tribute pitches over the 60, four in number, west of Bryn-pica shaft, are yielding on an average about 10 cwts. of lead ore per fm. The tribute pitch over the 100 fm. level, 35 fms. east of Taylor's shaft, is yielding 1 ton of ore per fm.; let to eight men, at 8*l.* per ton. The pitch over the 90 fm. level, 5 fms. east of Gilbertson's shaft, is producing 12 cwts. of ore per fm.; let to four men, at 9*l.* 15*s.* per ton. The pitch in the bottom of the 120 fm. level, 40 fms. west of Taylor's shaft, is yielding 10 cwts. of ore per fm.; let to four men, at 11*l.* 10*s.* per ton. The pitch in the bottom of the deep adit level, at Level Newydd, 50 fms. west of the cross-cut, is producing 15 cwts. of lead ore per fm.; this pitch is let to six men, at 8*l.* 10*s.* per ton, including all cost. The cross-cut, south from the boundary shaft, at the 55, is progressing favourably by six men, but no change of importance has occurred at this point since my last report, but the ground is looking kindly, and several cross branches and cross heads are often met with in the last few fms. in driving, and letting out a little water. The one man and a boy whom I have costeaning on the surface to the north of the drawing-wheel, at the boundary shaft, have discovered a lode about 35 or 40 fms. north of the lode, which a 60 or deep adit level is driven upon; it is discovered at a point about 35 or 40 fms. north of the drawing-wheel, and is running in the direction of 25 degrees north of west in going westward, and if it keeps its regular run as now seen in going westward (it is still a good many fathoms to the north of our cross-cut) from the 60, at Bryn-pica shaft, but about this we shall be much better able to judge in a short time, as I shall put the men to trace the lode further westward so as to get at the proper bearing for a greater length; the lode is about 3 ft. wide, composed of spar, gossan, and soft clay-slate, with an underlay south of about 1 ft. 3 in. per fm. We have only opened at present on it in one part for about 10 ft. long. The dressing, &c., with all other things here, are now going on regular; but we have been hindered from drawing and dressing, &c., for more than a fortnight in consequence of being short of surface water. Our pools have been quite dry for the above-mentioned time; but the heavy rain which fell during the last four days has set us in full work again, and we have a nice pool of water in our ponds at present, and I hope we shall not be short of water this year. We shall sample about 50 tons of ore on Tuesday next.

GRAMBLER AND ST. AUBYN.—Aug. 30: The 36, driving east, is worth 25*l.* per fm. The shaft sinking below the 24 is worth 40*l.* per fm. The 24 west, on north lode, is worth 12*l.* per fm. The 12 east, on north lode, is worth 20*l.* per fm. The winze sinking below the 24, on Williams's lode, is worth 20*l.* per fm. Other parts of the mine are just the same as for some time past.

GREAT CARADON AND SLADE.—S. Gregory, Sept. 1: The ground has improved in our engine-shaft, and we are now sinking the shaft at 13*l.* per fm.; this is splendid ground. We are cutting branches springing from the lode, with yellow copper, fluor-spar, and prian, and full of green carbonate of copper. We are 15 fathoms under adit, and 10 fathoms deeper we shall intersect the Sozen lode, where I have reason to expect a course of copper ore, as in the adit the lode is just 4 ft. wide, spotted throughout with copper, with a branch on the footwall of about 3 in. wide, nearly solid, and full of greens, can, mundic, and prian. Notwithstanding the favourable appearance of the adit I have stopped driving, as our shaft will shortly be down 25 fms. under adit, which will give 45 fms. from surface; and at that depth, from present appearances, we may expect a profitable mine. I shall advise a cross-cut to be driven north and south at the 45; there are five splendid looking lodes at surface, and they are no doubt the South Caradon lodes. On the south lode in the field the shaft is about 4½ fathoms; it being now dry I have cleared up the bottom; the lode there is 4 ft. wide, full of gossan, quartz, and yellow copper, and cannot fail to make a large deposit of copper at the 45. It will take a cross-cut I should think of 40 fms. to reach this lode, but there are two other lodes between this and the engine-shaft which we shall prove in driving. We are preparing for the engine as fast as possible. I have many visitors from the neighbouring mine, they are all highly pleased with the appearance of the lode; and upon the faith of our lodes and the South Caradon the parties at Wheal Hooper have resumed working by putting up a new engine, which is expected to go to work the latter part of next week.

GREAT SOUTH TOLGUS.—J. Daw, Sept. 1: The lode at Lyle's shaft is 2½ ft. wide, producing 4 tons of copper ore per fm. for the length of the shaft, which is 12 ft. In the 80, west of Lyle's shaft, the lode is 2 ft. wide, producing 3 tons per fm. In the 70 the lode is 1 ft. wide, producing 1 ton per fm. In the winze sinking below the 70 the lode is 2 ft. wide, producing 3 tons per fm.

GREAT TREGUNE CONSOLS.—J. Spargo, Sept. 1: The lode in the 60, west of Hobler's shaft, is still producing good stones of ore, and has every appearance of improving as we drive on. The lode in the 70 is greatly improving as we get nearer the shoot of ore gone down in the bottom of the 60.

GREAT WHEAL ALFRED.—M. W. Michell, W. Bugelhole, Aug. 28: The sinking of Copper-house shaft below the 190 is going on satisfactorily, and the lode quite equal in value and size as stated in our last report of Aug. 21—4 ft. wide, and worth 100*l.* per fathom. In the 190, east of the above shaft, the lode is disordered, and producing little copper ore. In the 180, a few fathoms east, we passed through some good bunches of ore, which we expect to meet with here very shortly. The lode in the 190 west is 2½ ft. wide, producing stones of copper ore; the lode in this end is getting more porous, and letting out more water. No change in the 180 west. We have suspended the driving of the 170 west on south part, and the 160 fathom level on the north part. No other change to notice.

GREAT WHEAL BADDERN.—J. Jenkin, Aug. 31: The ground and lodes throughout the mine are without alteration since last reported.

GREAT WHEAL BUSY.—J. Nancarrow, Aug. 28: In the 50 west there are branches of ore in the capel on the south part of the lode, but the progress is slow, it being very hard. The ore does not make further down in the 80 west than last week, but presents the same promising appearance in the back. The 90 east still produces good stones of ore. In Offord's shaft the lode is 3 ft. wide, worth (principally for tin) 10*l.* per fathom. The 100 east is worth 12*l.* per fathom for tin. The lode in Harvey's engine-shaft presents just the same appearance as last week, worth for the length of shaft 30*l.* per fm. The condensing water level is now cleared and secured throughout; the greater part of the new lift is fixed, and we expect to get it to work next week, when we shall get good water for condensing, which is so much needed. A large quantity of stone is now carried for the building of the new engine-house, &c.; all possible dispatch is being made in the getting out of the foundations, and we expect to be ready for building the latter end of next week. Nine men are engaged in cutting down Reid's shaft from surface, and nine other men are prepared to cut down below the shallow adit next week. Our sale of copper on Thursday realised 1420*l.* 6*s.* 6*d.*, and our tin to-day 60*8l.* 15*s.* 10*d.*, making a total for July of 2029*l.* 2*s.* 4*d.* We are making good progress in clearing the deep adit west.

GREAT WHEAL FORTUNE.—J. Daniel, R. Pryor, Sept. 1: Harvey's engine-shaft is sunk 6 fms. 1 ft. below the 85; in this level east the lode is producing saving work; in the same level west the lode is large, and at present poor. The rise in the back of this level is up 5 fms. 3 ft., lode 4 ft. wide, yielding tinstuff of poor quality. In the 70 cross-cut south the ground is hard for driving, consequently its progress is slow. In South Wheal Fortune deep adit level, driving west, the lode is small and unproductive.—Carnmeal: Painter's engine-shaft is sunk 9 fms. below the 26, lode 2 ft. 6 in. wide, composed of prian and mundic, which is congenial for tin. In the 26, east of shaft, the lode is 3 ft. wide, producing capel, mundic, jack, and a little tin, but not to value. The winze in the bottom of the 20 east is down 2 fms., lode 2 ft. wide, poor; in this level west the lode in the end is 2 ft. wide, of similar character as when last reported. Heskin's shaft is down 8 fms. 2 ft. below the 10, lode 3 ft. wide, worth 15*l.* per fm. In the 10 east the lode is 4 ft. wide, producing occasional stones of tin. The tribute department consists of 50 men, at tributes varying from 7*s.* 6*d.* to 13*s.* 4*d.* in 1*l.*

GWYDYR PARK.—H. Rawson, Aug. 31: In the Cross Mawr level the lode is about 18 in. wide, containing strong spots of lead on the hanging heading, which is the main lode, and on the hanging about 6 in. wide, not containing ore. We are driving between two lodes at present, and I think we shall be able to reach the junction of the Gorse lode in a fathom or 9 ft.

HAWKMOOR.—W. Tregay, Aug. 26: This mine, situate upon the eastern extremity of the county of Cornwall, close by the Tamer River, which furnishes the supply of water for driving the machinery used in pumping, hauling, grinding, &c., with Bedford United to the east upon the same lode, and the celebrated Devon Great Consols immediately on the north, strikes one in a moment as being in a very favoured locality; and the nature of the lode stuff in course of dressing upon the floors, shows that this is not all, but that it has innate qualities of its own. The principal engine-shaft (eastern shaft) has been sunk to the 60; here are two ends being driven, one east and the other west. The east end has been driven about 8 fathoms from shaft, being expected to be within about 2 fms. to the east cross-course, immediately beyond which the lode has made so rich in the level above. To reach this cross-course in this end, which is being driven as fast as possible, is a point ardently desired, as, should the lode be found orey immediately beyond, there is at once 20 fathoms in height of ore ground to be calculated upon above, and more than a probability of its continuing by the same cross-course deeper still; but the strike of the ore ground all through the mine showing evidently an eastern dip. It may at this depth be carried several fathoms beyond, which will be found to be the case, unless the cross-course has had an influence upon it; although such has often occurred, yet is by no means common. If this lode is found orey immediately on clearing the cross-course, then you have at once a good mine, but if not we must turn to see where are the next best chances. First, you may safely calculate upon reaching the ore in an extension of the 60 fm. level still east; next, you have your two western levels (60 and 50), which are being driven west of the shaft to reach two cross-courses, about which the lode was found good in the levels above. They will also prove whether there are other courses of ore, which may be expected to be formed about the flank of the granite range, also dipping cast like those already found. The 60 west end has been driven from the shaft about 8 fathoms, and within 2 fathoms to the large cross-course seen in the 50 and 40, where it hove the lode some distance to the right, and around which there were good shoots of ore found in these levels. The 50 end west has been driven through this cross-course, and west of it 10 fathoms, to within about 5 fathoms of the cross-course seen further west in the 40, which hove the lode to the left, and by which there is a good shoot of ore gone down in the bottom of the 40 fm. level. The extension of these ends is very important. As you have not driven any 50 fm. level east, the next in order is the 40, which has been driven east of shaft 12 fathoms to the east cross-course, and extended beyond it about 9 fathoms, the whole of which 9 fathoms has been through a lode from 18 in. to 2½ feet wide, worth full 2 tons of good ore to the fathom, and a very good lode still in the end. This is the shoot of ore aimed at in the 60 fathom level. Further up in the shallower levels there is nothing now being done save two or three pitches working, but the extent to which the ground has been evidently taken away fully shows the productive nature of the lode in those levels. There are two other engine-shafts, which were sunk in former days further west to the 40 fm. level, and they now serve to take off all the water of the mine from the 30. All the shafts are sunk perpendicular to the 20, where they take the lode, and below that are sunk on its course, which is a south underlie. As far as can now be seen, the eastern shaft, which is also the deepest, is in the best place for proving the mine in depth, being between the cross-courses, of which there are three strong and decided. The machinery is in good order, and does its work well. The stratum is clay-slate close upon the crystalline rock. The locality is good, the lode strong and productive, and the ore of good quality. Except the sinking of the engine-shaft (which should be continued as soon as the supply of surface water is such that you can depend upon continuing it), I cannot suggest anything better for opening up and proving this mine than you are already doing.

HINGSTON DOWN CONSOLS.—W. Richards, Sept. 1: The lode at Morris's shaft is still very large, impregnated with rich copper ore throughout. In the 100, west of shaft, the lode for 20 in. wide has produced some rich stones of copper ore, and promising to improve. The 110, west of Doidge's winze, is without change to notice. In the 75 east the lode is large, impregnated with ore, although at present not enough to value. The lode in the 65 east is from 4 to 5 ft. wide, carrying strings of rich ore, indicating an improvement. We sampled on Friday last 210 tons of average quality ore.

HOLMBUSH.—N. Seccombe, Aug. 31: In the 145 west no lode has yet been taken down, but the appearances continue good. The stopes in back of this level are yielding from 1 to 2 tons of ore per fm. The 160 end east, east of diagonal, is producing 1 ton of ore per fm.; west end, 1¼ ton per fm. In driving west in the 160, west of diagonal shaft, no other part of the cross-course has yet been discovered; if not intersected shortly we shall resume the driving south. The stopes in back of this level are producing 1 ton of ore per fm. The stopes in bottom of the 145 west are yielding 2 tons of ore per fm. In the 132 driving south, on the lead lode, the lode is composed of fluor-spar, mixed with lead ore; the ground is favourable for driving. The rise in back of this level is communicated with the 120, and a good ventilation effected. In the 145 west, on the flap-jack, the lode is unproductive. The lode in the rise in back of this level is composed of mundic and copper ore mixed, producing about 1 ton per fm.

KELLY BRAY.—S. James, Aug. 28: The lode in the 135 east is 1 ft. wide, composed of quartz, mundic, and spots of ore. The lode in the stopes in back of the 85 west is 2½ ft. wide, and worth 12*l.* per fathom. The lode in the winze in the 45 west is worth 30*l.* per fathom for the length of the winze, 12 feet. The lode in the 45 east is a little improved, and showing indications that something valuable will be met with ere long. The tribute department is much the same as it has been for some time past.—Eastern Mine: The men have completed cutting ground for the plunger at the 50, in Watson's engine-shaft, and commenced sinking the same below the above-named level for bearers and cistern, which is down about 4 feet. In the cross-cut north at the 40 the ground is very much altered, it is more capely, showing indications that there is something near at hand. We weighed off July ore at Cotehill on the 27th inst., which was 13*3* tons, and sampled for August 118 tons, computed, of about the usual quality.

LACKAMORE.—Aug. 30: Our setting for September was on Saturday, when the following pitches and bargains were set:—A pitch east of engine-shaft, at the back of the 34, to four men, at 12*s.* in 1*l.* A pitch over the 24, west of engine-shaft, to four men, at 9*s.* 6*d.* in 1*l.* A pitch under the 10, west of engine-shaft, to two men, at 12*s.* 6*d.* in 1*l.* A pitch under the adit level, east of Brian's shaft, to three men, at 9*s.* 6*d.* in 1*l.*, and a pitch over the adit level, east of Brian's shaft, to two men, at 10*s.* 6*d.* in 1*l.* A cross-cut south at the 34, east of engine-shaft, to two men, at 4*l.* per fm. The lode to stope down from the side of the 34, west of engine-shaft, to four men, at 30*s.* per fm. The lode contains portions of ore, but not enough to value. A stope over the 24, west of engine-shaft, on the south lode, to six men, at 6*l.* 6*s.* per fm., to carry all the lode, which now averages 10 ft. wide, and will yield from 1½ to 2 tons of ore per fm. A stope over the 10, east of engine-shaft, to four men, at 4*l.* 4*s.* per fm.; the lode yields from 10 to 15 cwts. of ore per fm. A cross-cut north from the engine-shaft over the adit to two men, at 5*l.* per fm., limited to 1 fm. The ground has been hard and tight for driving, but I hope from appearances it will soon change. The whole of the rock through which we are passing contains large quantities of mundic and small spots of copper ore. For the past month we raised about 12 tons of ore, which will be about the estimated quantity for the present month. We have 25 tons of ore clean, and 10 tons of this quantity delivered at Limerick, and now we have some increase of water we shall be able to move on faster.

LADY BERTHA.—Jas. Metherell, Sept. 1: We are progressing with the sinking of Moyle's shaft as fast as possible. We shall be obliged to drive the cross-cut in the 41, the drawing-lift being so long I am afraid of an accident; it is now more than 20 fms. In the 30 east the lode is 1½ ft. wide, composed principally of quartz, with mundic and some spots of ore; the same level west is being forced on with all speed. Not being able to sink Robins's winze, the water is so quick, I have put two men more; there are now eight; they are to work Saturday nights late and Monday mornings early; therefore, we shall get a communication speedily. In the 20 east there is no alteration; in the same level west, and west of Robins's winze, we have commenced to cut a plat for another, which will be called Carter's winze. This will go down just in the middle of the one driven through in that level. No alteration in the pitches.

MERLLYN.—J. Trevethan, Sept. 2: The shaft is sunk under the 25 fm. level 3 fms. 4 ft.; the lode is 4 ft. wide, with a most promising appearance, and intermixed with large lumps of lead ore.

MOLD.—John Hitchins, Sept. 1: The operations at Talbot's and Bentinck's shafts are in fair progress, but as yet there is no material discovery to report. The 30 is driving on a kindly lode, and as this level will prove the run of the eastern ground, the 40 in this direction is for the time suspended, and the stopes in the back a little better; the end set to work where the lode is worth 1 ton of ore per fathom. The pitch in the back of the sump level also continues to yield lead ore. The 40 west since last week has cut into the limestone tumblers, most probably of the flat, with very kindly indications (inclusive of white and blue lead ore) of a deposit being near, but until further proof we can only say that our prospects have improved.

MOLLAND.—T. Bennetts, Sept. 1: The sumpmen have finished cutting the plat, and are now engaged laying the sollar, &c., and they will commence driving the 32 east, which will be pushed on as fast as possible; set to six men, 2 fms., at 5*l.* 10*s.* The same level west has been set to two men, 1 fm., at 5*l.*, where we have a kindly lode, worth 8*l.* per fm. In the 20 east the lode is small, with spots of ore and mundic. In consequence of the air being dead here, this place has been set to two men only, 1 fm., at 3*l.*; this is considerably below my price, it having been cut down in the survey. The stopes in the back of this level are worth 5*l.* per fm.; set to four men, 1 fm., at 3*l.* 10*s.* We have made a small pond to contain condensing water, of which we have a sufficient supply. The engine is in good order, and works well.

NANTYNOD.—A. Francis, Sept. 1: Agreeably with your request, I have examined this mine, which is situate about ¼ mile to the west of the West Potosi, where they have recently discovered a rich bunch of ore, by driving a cross-cut a great length to intersect the vein, and by continuing which they have intersected another vein this week, containing a rich bunch of lead ore. Both of these veins run through your sett for a distance of nearly ½ mile, and may be seen at surface, carrying with them every indication of their becoming very productive in depth. The ground is beautifully situated for the driving a deep adit level, which may be commenced on the main, or West Potosi, lode, and by extending eastward a back of 3 feet in a fathom will be obtained, until it reaches the summit of the hill, where it will be nearly 100 fms. high, from which point, or earlier if thought necessary, the other lodes may be cross-cut, and will undoubtedly be found rich in lead ore. I have hitherto alluded to the veins seen at the West Potosi that run through your grant; to the south of these there are two other veins of great promise, on one of which, the most southerly, two shafts have been sunk a very few fathoms, each of which has produced copper ore of a very rich quality, and I am informed in the bottom of these the ore was fast improving, and that a good mixture of copper, 1 foot wide, was left in the bottom; this can be easily ascertained, as a few men in a day or two would be sufficient to draw out the water. There are some very rich pieces of copper now lying at the shafts, which in my opinion corroborates what has been said. The roads leading to the mine are good, being only situate about two miles from the village of Talybont, and an ample supply of water at all seasons of the year, with a royalty of 1-12th. I have no doubt of your property becoming extremely valuable, and that a very small outlay will suffice for all purposes. Any further information you may require I shall be happy to give, as

NORTH BASSET.—Thos. Glanville, Sept. 1: There is no alteration to report on this week. The levels are looking just the same as for some time past.

NORTH BULLER.—T. Glanville, Aug. 28: Yesterday being our monthly tutwork setting, the following bargains were set:—Louisa engine-shaft to sink under the 84 by six men, at 20*l.* per fm. The 84 cross-cut to drive north of Louisa engine-shaft by four men, at 8*l.* 10s. per fm. The cross-cut is extended 3 fms., but no lode as yet intersected.

NORTH DOWNS.—W. Johns, J. Grenfell: The ground in the engine-shaft, sinking below the 30, is considerably cased, and is of a character to be congenial for mineral. In the 30, east of the engine-shaft, we have recently met with some floors of spar, which have split up the lode for the present, now yielding 1¼ ton of copper ore per fm. Since our driving this level similar floors of spar have been often met with, and as soon as they disappear greatly enhance the value of the lode. The lode in the winze sinking under this level, on the north part, is 2 ft. wide, with a very promising appearance, but not rich for copper. A winze sinking under the 20, west of Bennett's cross-course, and about 15 fms. before the 30 end, is down 6 ft., in which the lode is composed of quartz, blende, and spots of ore, a very kindly lode; we are looking forward here for good results. In the 20, east of Bennett's shaft, there is a large lode, with stones of ore, but not to value. There is no change to remark in the 20 cross-cut, south of Bennett's shaft, nor the 10 cross-cut, south of the engine-shaft, since last reported. We have set our usual number of pitches, and our next sampling will be about 40 tons of improved quality.

NORTH FRANCES.—J. Moyle, Sept. 1: In Ealc's shaft, sinking under the 60, there is no change in the appearance of the lode since my last report. The lode in the 48 at Ealc's shaft is 1 ft. wide, unproductive, driving by six men, at 4*l.* 4s. per fathom. In the 36, west of Ealc's shaft, the lode is 2½ feet wide, principally spar, unproductive, driving by six men, at 4*l.* 4s. per fathom. The new shaft sinking, under surface through killas, by nine men, at 10*l.* per fathom, is about 12 fm. 3 ft. deep, and the ground a little harder for sinking.

NORTH LAXEY.—R. Rowe, Aug. 31: The shaft is down 12 fms. 3 ft. 6 in. below the 12 fm. level. I have determined to sink another fortnight, and then cross-cut to the lode, which will, perhaps, be about 9 ft. The lode in the 12, driving south, is split into two parts; that on the footwall is a rich gossan, mixed with white and blue lead, varying from 6 in. to 1 ft. wide. We shall sample 15 tons of lead next week.

NORTH PENHALDARVA.—W. Richards, Aug. 30: We have set the shaft to sink, the whim-round to make, and the whim to put up; price for sinking 3*l.* per fm., but it will take a week to get up the whim, &c., before we commence sinking.

NORTH WHEAL ROBERT.—J. Richards, Sept. 2: Murchison's Engine-shaft: In the 62 west the cross-cut is still being continued south, but no other part of the lode has yet been met with. In the 52 west the lode is still being cut through; it is, so far as seen (8 ft.), composed of capel, mundic, quartz, and good stones of ore. The lode in the stopes in the back of the 52 west is worth 2 tons of ore per fm. In the cross-cut north, in the 30 west, the ground is easy for progress. A branch has been intersected 6 in. wide, it is, however, unproductive.—Trial Shaft: In the 42, west of the cross-cut, on the south part of the lode, the lode is worth 2 tons of ore per fm.—South Lode: In the 42 east and west but little has been done, the men having been engaged putting in tramroad, which is now finished; the lode is promising, and contains good stones of ore.

OLD TOLGUS UNITED.—G. Reynolds, Aug. 30: I beg to hand you a statement of the setting on Saturday last:—viz., to drive west on the caunter at the 32, by four men, at 4*l.* 10s. per fathom, lode saving work for copper ore and blende. To sink a winze below the 16, west on engine-lode, by two men, at 5*l.* per fathom, lode 2 feet wide, producing good stones of ore. To drive west on the south lode, at the 32, by four men, at 6*l.* per fathom, lode 15 in. wide, saving work for dressing. To drive east, by two men, at 4*l.* per fathom, lode again improving, producing rich stones of ore throughout. To rise in the back of this level, by four men, at 15s. per fathom; the rise to be 12 feet long, lode worth for the length of the rise (12 feet) 40*l.* per fathom. To sink the shaft on the new south lode, by four men, at 4*l.* per fathom, lode 2 feet wide, saving work for copper ore and blende; this shaft is now down 8 fms. 3 ft. 6 in. from surface. Our dressing is going on satisfactorily.

PEDN-AN-DREA.—Capts. Carpenter, Deibridge, and Thomas, Aug. 28: The sumpmen have been cutting ground, fixing tackle, and clearing up engine-shaft below the 90; by the end of next week we hope to see the bottom, 12, as stated by the old workers, it be 5 fms. below that level. We have nearly cleared all the accumulated stuff from the ends in the 90, west from engine-shaft; the men are now engaged putting in timber, to secure the levels about the cross-course. The rise in the back of the 68, west from engine-shaft, is worth about 10*l.* per fm. The new lode in the 55 east is gradually improving as we get east from the cross-course; we have broken a little more copper ore this week than for some time past; the lode has a promising appearance, and in a good stratum of mineral ground.

PEMBROKE AND EAST CRINNIS.—J. Daie, G. T. Trewren, Aug. 31: The ground in the 162 cross-cut, south of Reid's shaft, is still favourable, and is letting out more water than we have seen here for some time past. In the same level west the branch is much the same as last reported—about 8 in. wide, orey throughout. In the 112, east of Smith's shaft, no lode has been taken down during the week; the men are at present driving by the side of it in killas; there is a larger quantity of water issuing from this end also than we have ever seen come from it, and we consider this a favourable indication. In the stope in back of the same level the lode will produce 2 tons of ore per fm. In the 100 end, east of Smith's shaft, the lode has improved, and is from 3 to 4 feet wide, worth about 1 ton of ore per fm. The stopes in back of this level will yield full 1½ ton of ore per fathom. In the winze in the bottom of this level the lode is worth from 3 to 4 tons of ore per fm. Smith's shaft is going down favourably. Ground driven during the week:—The 162 cross-cut, 4 ft. 6 in.; on branch west, 4 ft. 6 in.; the 112 end east, 5 ft.; the 100 end east, 3 ft. 6 in.; Smith's shaft, 5 ft.

PENDEEN CONSOLS.—W. Eddy, Aug. 31: We have an improvement in our 70 end north; the lode is looking very promising, and will produce much ore; the ore being what we miners term bell-metal ore, similar to the piece I sent you in the box of ore from the mine. It is a very good lode, and shall report to you its value on Saturday. Our crusher is going on very well, and will be a fine one. We expect to begin crushing in the early part of next week.

PENHALDARVA.—W. Richards, J. Pope, Aug. 28: The engine-shaft is below the 20 fm. level 3 fms., on the east side of the lode, which is 20 inches wide, composed of soft spar, and spotted with lead, a very promising lode, set to six men and three boys, at 12*l.* per fathom. In the 20 fm. level north we have driven the past month 6 fms. through a lode of a promising character, producing good stones of lead, driving by three men and two boys, at 2*l.* per fathom. In the 20 south we have driven 4 fms., lode unproductive, set to three men and one boy, at 4*l.* per fathom. In the 10 north we have been cutting through the lode, which is about 5 feet wide, composed of flookan, mundic, soft spar, and spotted with lead, set to three men and three boys, at 2*l.* 10s. per fathom. In the winze sinking below the 10, north of engine-shaft, down 2 fms., will produce 1 ton of lead per fathom, sinking by two men, at 2*l.* per fathom; it should also be borne in mind this winze is before the 20 fm. level about 12 fms. The 10, south of engine-shaft, is driven this month 2 fms. 1 ft., lode improved, the last 6 feet driving producing stones of lead, driving by two men, at 2*l.* per fathom. The stopes in back of the 10, south of Vigus's winze, will produce ½ ton of lead per fathom, stoping by four men, at 1*l.* 5s. per fathom. The stopes in back of the 10, north of Vigus's winze, will produce ½ ton of lead per fathom, stoping by three men, at 1*l.* 10s. per fathom. The prospects throughout the mine are of a very promising character, and we have every reason to expect improvements shortly.

POLBREEN.—Sept. 1: The setting report, &c., would have been sent you on Monday, but wanting to see a little more of the lode taken down in the 32 fm. level east first, but it being so hard and large we have not been able to do much by it, consequently the men have begun to drive by the side of it again; the lode is nearly 4 ft. wide, with a little tin in it, but nothing to value; it is a strong, fine-looking lode, and much larger than it has been seen anywhere before, and quite dry in the end. All the water is flowing from the bottom of the level; it is being driven by three men and three boys, at 7*l.* per fm.—driven in the last month 3 fms. 1 ft. The lode in the 32 fm. level west is also poor; it is about 15 in. wide, composed of peach and mundic, with spots of tin; this end is also being driven by three men and three boys—driven last month 3 fms. 0 ft. 6 in. The lode in the 22 fm. level east is about 18 in. wide, pretty good work; there is only one man and a boy driving it, it being so far from shaft, and having two pares of tributers behind it. We shall not be able to put more before the eastern winze is holed to the 32 fm. level, after which we shall be able to put a full pare in it; in the meantime, we shall get in a tramroad; this end looks kindly to turn out a little tin, and a pretty piece of ground before it. Dorcas's shaft is harder than it was last month—the present price is 22*l.* per fm.; there was 1 fm. 2 ft. 3 in. sunk last month; besides this the shaftmen cut a good trip-plat, ground for tackle, barrow road, &c., to bring the stuff to the tripplat from the western end. There has not been any lode taken down in the shaft. We have now six pitches working—two east of Dorcas's, in the back of the 22 fm. level, one at 11s. and the other at 12s. in 1*l.*; one west of the same shaft, in the back of the 22, at 13s. in 1*l.*; and three at sump, at 13s. in 1*l.* We are now in want of rain, to enable us to begin to stamp the work.

PROVIDENCE (Lelant).—A. Anthony, Sept. 1: The lode in the 75 end, east of Higgs's shaft, is 3 feet wide, worth 35*l.* per fathom. The lode in back of the 75 east is 3 feet wide, worth 60*l.* per fathom; the stopes under this pitch are 3 feet wide, worth 35*l.* per fathom. The cross-lode in the 75 east is 6 feet wide, worth 45*l.* per fathom. The new discovery in the 75 east is 2 feet wide, worth 7*l.* per fathom. The lode in bottom of the 65 east is 4 feet wide, worth 55*l.* per fathom. The lode in bottom of the 65, east of Comfort lode, on a limb of the carbona, is 18 in. wide, worth 6*l.* per fathom. The lode in Dunstan's shaft is 2½ feet, worth 5*l.* per fathom. The lode in the 55, east of Dunstan's shaft, is 18 in. wide, worth 4*l.* per fathom. The lode in the 24, east of Dunstan's shaft, is 18 in. wide, worth 3*l.* per fathom.

RAMSLEY HILL.—C. Henwood, R. Barkell, Aug. 28: Our engine-shaft is now down about 13 fms. from surface We are still sinking in the lode, which is composed of gossan, capel, and good stones of purple and yellow ore. The rise in back of adit against engine-shaft is up 10 fathoms. Our progress during last week has been slow in consequence of a hard floor having crossed the rise; we hope to make a communication between this and the shaft in about a month. Wood's stope, on north lode, is worth about 2 tons of good ore per fathom, ground easy for working. Hoare's stope, on south lode, will yield 3 tons of ore per fathom; the wheel-pit will be excavated in the course of next week. We have now at Copplestone between 50 and 60 tons of copper ore, and a considerable quantity on the floors. We have received large portions of the machinery on the mine, which is of very large dimensions, and well prepared; and will, ere long render us great facilities for increasing our sales of ore.

REDMOOR.—T. Taylor, Aug. 30: The lode in the 20 end, north on the lead lodes, is producing about 3 cwts. per fathom. We expect to hole the 40 rise to the 20 winze this week. No change worthy of notice in the 80, west on the count-house shaft lode; nor in the 80, east on Kelly Bray lode, during the past week.

RHEIDOL.—R. Ridge, Aug. 28: Rhymligas upper workings, No. 3 winze below the old adit level, is now sunk upwards of 9 fms., and on Monday will be communicated with the 10; this winze has been sunk on a lode of which I cannot tell the exact width, but that part which we passed through in sinking was composed of solid blende 4 ft. wide, and a good mixture of lead. The 10 has now reached the blende seen in the winze, but has not been taken down for the last 2 fms.; the communication of the level and winze will greatly facilitate the further working of the mine. No. 2 stope, above the 10, is worked by two men; there is about 10 in. of blende on the south side of the lode, a good string of lead on the north side, and there will be a good opportunity of putting more men to stope in this place after next week. In Midway level the end has gone through some poor ground; we are fast approaching a good run of blende seen going down the winze and 10 fm. level. We estimate this will be better ground than yet reached, the blende being very solid and more tendency to make lead. The main stope above this level is worked by eight men; in this stope we have abundance of excellent blende, more solid and compact than any seen in the upper workings, with the exception of the winze; it is almost unmixed with stone; there is a very large quantity of blende on the stulls, at least 50 tons; it will be impossible to remove this for some time, as the men are working upwards upon it to the 10; the stope is now about 18 fms. in length. We propose driving in this stope to the 10, which will fully ventilate the mine, and enable us to place the ladder-way to all parts. The large pipe of blende seems to be going equally solid below the midway level. At the deep adit level the ground is more promising, with a fine lode of soft spar and clay-slate; we have good reason to hope the result of this level will be satisfactory. Rathdu is being driven by two men, the lode still composed of flookan and very easy for driving, and set at a low price. We have shipped this week 78 tons 9 cwts. of blende, and 85 tons are now ready to ship, a greater part of which is best ore. During the incoming month we shall be able to sample another parcel of blende.

RITTON CASTLE.—J. Lester, Aug. 31: There is no alteration in the character of the ground through which the engine-shaft is being sunk. It is now 26 fms. 4 ft. deep. Sunk since last report 5 ft.

RIVER TAMAR.—J. Cock, Sept. 1: In the 70 west we have driven to the cross-course, and cut into it about 3 ft., but are not yet through it. In the shallow adit cross-cut we are proceeding satisfactorily.

ROSEWALL HILL AND RANSOM UNITED.—P. Rosch, Sept. 1: Since Aug. 25 we have cut down and secured 2 fms. of engine-shaft, or nearly completed it to the bottom of the present lift, and cleared and secured 3 fms. of Tredinnick's shaft. In the Ransom we have driven 1 fm. on the cross-course north, put the Ransom shaft in working order from the 30 to the 40, and commenced clearing below. We have also begun to clear the 20 west of shaft. Much is still doing at surface for stamps and other conveniences. The engineers have this day begun their preparations for heaving in and putting together the engine.

ROUND HILL.—A. Waters: The engine-shaft is sunk 3 fms. below the 52; ground much as usual. The 52 is driven south of shaft about 15 fms.; the lode in present end is split in two parts, the master course being against the west side, as was the case in the upper levels. We may expect a productive lode in this level shortly, being near the junction of the caunter lode. The winze sinking below the 40, south of engine-shaft, is down 8 fms. 2 ft.; lode large, yielding good ore throughout. There is no change to notice in the stopes in back of said level since last reported on. The stopes in back of this level north are not looking so well, and are now let on tribute, at 6*l.* 10s. per ton of lead ore. The winze sinking below the 30, north of shaft, by six men, at 11*l.* per fm., is down about 4 fms.; good lode in both ends, and present bottom worth 2 tons per fm.; this winze will open two good stopes for us. There is no change of importance in any of the tribute pitches for some time past. We sampled, on Monday, August ore, computed 45 tons, tenders for which will be delivered on the 6th inst.

SORTRIDGE CONSOLS.—J. Richards, Sept. 2: The pitwork arrangements at Hitchins's engine-shaft are progressing satisfactorily, and will be completed in the course of next week, when sinking will be resumed below the 86. In the 59 west the leading part of the lode is becoming larger and more promising, containing quartz, prian, and stones of rich ore. The lode in the pitch in the bottom of the 40 west is still in a good course of ore, worth 50*l.* per fm. There is no alteration in any other part of the mine.

SOUTH BULLER AND WEST PENSTRUTHAL.—G. Reynolds, Aug. 30: I set to drive the cross-cut by four men, at 7*l.* 10s. per fm.; the ground is more mineralised than it has been, and we have every prospect of cutting a productive lode; ground driven last month, 2 fms. 3 ft.

SOUTH CARN BREA.—T. Glanville, Sept. 1: At the flat-rod shaft, sinking below the 68, the lode is 3 ft. wide, yielding 2 tons of copper ore per fm. There is no alteration to report in the other parts of the mine.

SOUTH CRENVER.—J. Delbridge, E. Chegwin, Aug. 30: The 94 rise is in tribute ground. The 84 winze is in tribute ground. In the 94 west the lode is worth 4*l.* per fm. In the 74 east the lode is 1½ ft. wide, with stones of ore. In the 84 east the lode is 2½ ft. wide, worth 9*l.* per fm. Tribute throughout the mine much as usual.

SOUTH CUDDRA.—S. Truran, Sept. 1: We have completed cutting the shaft-plat, and are driving the cross-cut towards the lode, by six men, at 4*l.* per fathom; I expect we have some 8 or 9 fms. to drive before we reach the lode, but it will in some measure depend on its underlie. There is a large orey lode in the West Crinnis westernmost stopes in the 30, and I think we have a good chance of meeting with ore here (in this 30 fathom level); if so, we have high stopes as the lode is not seen below the adit level. The cross-cut shall be pushed on as fast as possible. The engine and rods, &c., are in good working order.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—Wm. Roberts, Aug. 31: Nothing new since last reported.

SOUTH LADY BERTHA.—W. Goss, Sept. 2: The water is now in fork some 5 ft. below the 20. From the shaft a cross-cut has been driven, and the lode cut at the 20, and some 5 fms. driven east and 10 fms. west on the lode, from which we have broken good stones of ore, but the level being full of attle and dirt I cannot fully describe its character until next week. In a winze sinking 6 fms. deep below adit the lode is from 3 to 4 ft. wide, of the most promising character, composed of quartz, fluor-spar, mundic, 5 or 6 tons per fathom, and from 1 to 2 tons of rich copper ore per fathom; this winze is 15 fms. east of the shaft, consequently is going down in whole ground from surface to the bottom of the mine. No levels are driven at the 30; and from the accounts I got from the men who last worked in the mine but little has been down at the 40, although at this level many good parcels of ore were returned, in a very short time, by the former company. Now the water will be in fork to the bottom, as ample machinery, with powerful water-wheel, are erected to drive it. We have commenced to drive copper ore for a sampling, and hope to give a more detailed account in our next.

SOUTH WHEAL BETSY (Mary Tavy).—C. Bartle: Aug. 31: The mine is progressing favourably. In the whim-shaft the lode is 3 ft. wide, producing saving work for lead and good stones of copper ore. In the rise in the back of the 32 the lode is 5 feet wide, worth 15*l.* per fm., and the ground favourable for rising. In the winze on the western lode the lode is 4 ft. wide, composed of white and blue flookan, mundic, jack, and lead. In the pitch in the bottom of the 10, north of the whim shaft, the lode is 3 ft. wide, worth 25*l.* per fm. We shall commence operations in the cross-cut east of Carpenter's shaft next week, and hope the crusher will be completed by the end of this week.

SOUTH WHEAL TOLGUS.—Aug. 28: Youren's Lode: Michell's sumpmen are engaged about the necessary work, such as putting in bearers, cisterns, &c., in the 110, preparatory to fixing the plunger-lift. The lode in the 110, west of Michell's, is 2 feet wide, yielding 4 tons of ore per fm. In the 110 east, on this lode, the lode is 6 in. wide, yielding ½ ton of ore per fm. In the 100 west the lode is 1 ft. wide, yielding 1½ ton of ore per fm. The lode in the winze sinking in the bottom of the 100 west is 15 in. wide, yielding 1 ton of ore per fm. Our three stopes in the back of the 100, west of Michell's, are yielding from 3 to 3½ tons of ore per fathom each. In the 90 west the lode is 18 in. wide, producing good stones of ore, and has a kindly appearance. The lode in the 78 west is 10 in. wide, yielding 1 ton of ore per fm.—South Lode: In the 110 east the lode is 3½ ft. wide, yielding 1 ton of ore per fm., and promising for further improvement. No lode has been taken down in the 100 east since last reported. The lode in the 90 and in the 78 east is small and unproductive. The stope in the back of the 90 east is not looking so well as when last reported, now yielding 1 ton of ore per fathom. There is no alteration in the ground in the 78 cross-cut, south from Michell's, to notice since last reported.

ST. AUSTELL CONSOLS.—R. H. Williams, Aug. 28: In the 45 cross-cut the ground is changing a little harder, and is now set to drive at 4*l.* per fm.; this end is now about 10 fms. from the elvan course. The 35 is set to drive on the course of the lode (under it) at 20s. per fm. The 25 fm. level stope, east of cross-cut, is worth 4 cwts. of tin per 100 sacks. Barker's lode, west of cross-cut, is a fine lode; when this lode is cut at the 35, west of cross-cut, I believe our returns will improve. This lode is about 4 fms. wide, worth from 3 to 4 cwts. of tin per 100 sacks. All the other stopes in this level are producing their usual quantity of tin. The western part of the mine is poor at present. The 15, at Dowson's, is very poor at present, but an indication of improvement shows itself. The ground at the 35, east of the slide, being driven for 20s. per fm., will now enable me for a little money to open this lode, when I consider there is every chance for a rich deposit of tin. A few weeks will open a long piece of ground in this lode. I consider we have great prospects near at hand to be realised. I hope to cut Barker's lode at the 34 this month; if so good as at the 25 it will be a grand thing for the mine; I expect it will be equally good.

ST. DAY UNITED.—W. Teague, Aug. 31: Poldice District: In the 144, driving west of Tussall's north shaft, the lode is 1½ ft. wide, producing good stones of ore, but not in sufficient quantities to value. In the 144, driving east, the lode is 1 ft. wide, at present poor. In the 124, on the tin lode, driving west of Trussall's south shaft, the lode is 3 ft. wide, producing a little tin. We shall make the necessary alterations in the flat-rods to Billing's this week, and the drainage commenced forthwith. In the 124 on Field's lode, driving east of Quick's, the lode is 1 ft. wide, with a very kindly appearance, and producing good stones of ore. In the 114, on Field's lode, driving east, the lode is at present unproductive. Other places are without alteration.—Wheal Unity: Tod Pool engine-shaft is being sunk under the 134 fm. level 16 fms.; we intend making this a 20, or sink to the 154 before commencing driving. In the 134, driving west, the lode is large, and producing rich stones of ore. The other tutwork throughout this district is without alteration since my last. We have taken in six sumpmen to go in Bissoe Pool shaft, and shall commence to clear the diagonal from the 70. We hope to complete the machine whim-house in the course of a fortnight from this time.

TINCROFT.—J. Cock, Aug. 28: Highburrow Lode: In the engine-shaft sinking below the 162 the lode is 4 ft. wide, worth for tin 30*l.* per fm. In the 162, driving west of shaft, the lode is 3½ feet wide, worth for tin 25*l.* per fm. In the 173, driving east of Martin's east shaft, the lode is 2½ feet wide, worth for tin 16*l.* per fm.; in the 175, driving west of shaft, the lode is 3 ft. wide, worth for tin 8*l.* per fm. In the 162, driving east of shaft, the lode is 3 feet wide, worth for tin 15*l.* per fm. In the 152, driving east of shaft, the lode is 4 ft. wide, worth for tin 10*l.* per fm.—Chapple's Lode: In the 142, driving west of downright shaft, the lode is 3 ft. wide, worth for copper 15*l.* per fm. In the 120, driving west, there is no change to notice this week.—North Tincroft Lode: In the 154, driving east of Tyrie's engine-shaft, the lode is small and poor; in the 154, driving west of shaft, the lode is 2 ft. wide, worth for tin 6*l.* per fm., with a kindly appearance. In the 60, driving east of Willoughby's shaft, the lode is 3 ft. wide—poor.

TREGARDOCK.—Sept. 1: The shaft sinking below the shallow adit is progressing satisfactorily, and is set at 7*l.* per fm. The deep adit is cleared to the end; the lode in the end worth 5 cwts. of lead per fm. In the bottom of the level, 2 or 3 fms. from the end, the lode for 10 ft. long is 1 ft. wide, and solid, worth 3 tons of lead per fm. In the back of the level, 6 ft. from the end, the lode for 5 fms. long is worth 1½ ton of lead per fm. So soon as the shaft is communicated with the deep adit we can return 20 to 30 tons of lead per month.

TRELYON CONSOLS.—R. James: The 30 is at present the deepest point of operation. Since the last general meeting we have communicated the rise in the back of the 30 with the winze in bottom of the 20, west of Parry's shaft, and the men are again engaged in driving the 30; the lode is poor. Four men are stoping the back over the 30, west of Parry's shaft; the lode is worth 8*l.* No. 1 stope, in the bottom of the 20, west of Parry's shaft, is worth 10*l.* No. 2 ditto is worth 7*l.* We have finished stoping the ground from the 10 to the 20 home to the cross-course, and four men are now driving the 20 through the crossing; here we do not expect much tin before we get into settled ground the other side of it. The 10 is driven through the cross-course, and the lode is improving, but not enough tin to pay. No. 1 stope, in back of the 20, west of Parry's shaft, is worth 9*l.* No. 2 ditto is worth 10*l.* Two men are stoping the back over the 20, west of Lawry's shaft; the lode is worth 6*l.* These are all the places at work for the present. Our prospects are much the same as last quarter, but with a little improvement to the west of the cross-course, which we may reasonably expect, we shall soon get into a paoftable state.

TREWEATHA.—T. Richards, W. Rowe, Sept. 1: The lode in the 90 is 20 in. wide, producing about 3 cwts. of ore per fm. The 70 end north continues to be worth 3*l.* per fm. The 50 cross-cut is extended 8 fms. 2 ft. towards the eastern lode. The stopes are much as last reported. We sampled last evening two parcels of ore—No. 1 (computed) 11 tons; and No. 2, 17 tons.

WEST ALFRED CONSOLS.—S. Lean, R. Stevens, Aug. 30: The north wall of the lode in the 55 west appears to be more orey, we have, therefore, given instructions to take down the whole lode, after which you shall know the result.

— Aug. 31: The lode in the 55 west is daily improving, now producing 2 tons of ore per fm., and no south wall.

— Sept. 1: The 55 is looking better to day, and will now produce 2½ tons of ore per fm., and every prospect of a further improvement.

WEST BASSET.—W. Roberts, Aug. 31: On north lode, in the rise in the back of the 124, the lode is 3 feet wide, with stones of ore; in the same level, driving west, the lode is 4 feet wide—good tribute ground. In the 104 east the lode has not been taken down since setting-day. In the 84 east the lode is 3½ feet wide, producing 4 tons of ore per fathom. In the 75 east the lode is 1 foot wide, with occasional stones of ore.—Engine Lode: In the 75 west the lode is small. In the 65 west the lode is 2 ft. wide, producing Lode: In the 75 west the lode is small. In the 65 west the lode is 2 ft. wide, producing 2 tons, and the same level, east of Percy's, produces 2 tons of ore per fathom.—Caunter Lode: In the 84 east the lode is 1½ foot wide, producing 1 ton of ore per fathom. Other parts are progressing satisfactorily.

WEST CRINNIS AND REGENT UNITED.—J. Webb, Sept. 1: Since draining the 70 we have cleared 40 fms. east and 30 fms. west of engine-shaft, and find there is much ore ground standing in the back of this level. The cross-cut extending north at the 70, toward's Bell's lode, is favourable for driving; set to six men, at 2*l.* 10s. per fm. The ore ground already reported on in the back of the 60, is turning out to be equal to expectations. Both the 60 and 70 are being cleared west to a winze sunk from one to the other, but are at present full of broken timber and rubbish; until that is done we shall not be able to go on westward. These are the two levels we intend putting back under West Crinnis, which has only been sunk to the 40. The engine-shaft (under the engine) is down 5 fms. below the 20. I expect in six weeks to communicate this shaft to the 40, then a great part of the present burden will be taken off from the flat-rods. The tribute pitches are turning out ore just as usual. I am glad to say that the surface and underground operations are getting into complete order of working.

WEST DOLCOATH.—G. R. Odgers, Aug. 31: South Mine: Kenworthy's shaft is in readiness for hauling, having secured and cased it; we are now engaged erecting the horse-whim, poppet-heads, and making the whim-round, which we hope to finish in a day or two, so as to have the stuff cleared away.—North Mine: We have commenced the air-shaft on the north cross-cut, the ground in which is easy, and if we do not meet with any water it will speedily be sunk. The shaft in the adit end, on the main lode, continues with elvans, which makes it rather spare for sinking.

WEST GRENVILLE.—S. Berryman, Sept. 1: The adit end west is not looking so well as it has been; it is now worth from 2*l.* to 4*l.* per fm.

WEST HAWKMOOR.—W. Tregay, Aug. 26: This mine is situate immediately west of Hawkmoor, and upon parallel lodes. Although Hawkmoor lode crosses here, yet it is too far north to be seen in the adit level. There are four parallel lodes, all of which having been extensively worked upon the backs by those indefatigable worthies, the old men, no doubt as low down as they could go for water, may naturally enough be expected to have been to them productive, to have induced them to work so extensively. There has been an adit level taken up here, and driven south into the hill, with a view to cross-cutting these lodes below the old workings. After driving 35 fms. the lode No. 1 was cut, or rather the gunnis, the lode having been all taken away by the old men to even lower than this adit level: 15 fms. further driving showed a caunter lode, and 15 fms. still further driving another east and west lode (No. 2), which, however, is here very small, but so far as it goes is a very pretty lode, and has yielded some good copper ore; this lode has been driven upon west for about 2 fms., and is now being driven by six men. There are about 7 fms. to drive to reach its intersection by a cross-course, and about 5 fms. further its intersection by the caunter lode already referred to. These are desirable points to reach, and you are doing right by driving to them. After reaching these, however, I think you might cut the other lodes something cheaper by extending upon either the cross-course or caunter than by continuing the present cross-cut. The cross-cut has been extended 4 fms. further south, having about 12 fms. more to reach Delve's Kitchen lode, on which the old men's workings upon the back are very extensive, and about 14 fms. still further south to reach another lode (No. 4); all these lodes underlie a little south. The hill rises very rapidly, so that this adit will give those lodes a good trial; here you are into the granite, which has been found so productive of copper ore heretofore. With Old Gunnis Lake Mine on the south, the Devon Great Consols north, and Bedford United on the east, thus surrounded upon every side by productive and profitable mines, having, too, several promising lodes in your own mine within a short distance of each other, there can, I think, be no two opinions about the high promise of the mine being now opened up.

WEST ROSEWARNE.—W. Richards, Aug. 30: I see but little alteration, if any, since the report I sent about a fortnight since. The lode is large in the 50 east and west, and there is a little ore in the east end, but the western end is poor.

WEST SHARP TOR.—W. Richards, Aug. 30: We have obtained some good stones of the same quality grey ore from Morris's shaft, since your visit as that you took back with you on Tuesday last, and the ground is equally easy for sinking. The part of lode taken down in the 110 west in the past week is equally as promising as when last reported on. There is no change in the new shaft, or cross-cut north therefrom.

WEST WHEAL TREVELYAN.—J. D. Osborn, Aug. 28: Yesterday we held our monthly setting:—Cater's engine-shaft to sink below the 10 by six men the month, at 110s. per fm.; shaft now 5 fms. below that level, and ground of the same character as 110s. per fm.; shaft now 5 fms. below that level, and ground of the same character as described in former reports. The 10 to drive west of Cater's, on Park lode, by three men, described in former reports. The 10 to drive west of Cater's, on Park lode, by three men, 5 fms., or the month, at 50s. per fm.; this end is driven 5 fms., and we have been driving on the north part of the lode, which is showing a very promising appearance, as the lode is producing some very good stones of grey, black, and malachite copper ore, similar to that seen in the adit level. The 10 to drive east of Cater's, on Park lode, by three men, 2 fms., or the month, at 70s. per fm.; this end is driven 4 fms. on the south part of the lode, and showing good spots of ore in a fine prian. Winze to sink below the adit level west of Cater's, on Park lode, by four men, the month, at 45s. per fm.; this winze when down will ventilate the 10, and prove the branch of ore cut in the adit, that we stated last week worth 20*l.* per fm. On the whole, we have a very promising mine.

WHEAL ADDAMS.—Richard Moore, Sept. 2: Since my last report on the mine I have added two men at the south engine-shaft, but, up to this date, have not reached the 40. There is but very little appearance of the former shaft, the break is general, and clearly caused by some heavy weight falling on the timber and carrying nearly all before it; however we are progressing slowly, and hope soon to complete the same. The trial shaft is without alteration. Three pitches are re-set at former tributes—one in the 28, by four men, at 8s. per ton for blende, and 3*l.* per ton for lead; two in the 18 at 10s. per ton for blende, and 3*l.* per ton for lead. I have commenced a cross-cut in the 28 and driven nearly 2 fathoms, in doing which we have cut the western blende lode and barytes lode; 7 feet of this ground must be saved for blende and lead. We shall continue this cross-cut until we reach the western lode, believing not far from this point we shall cut the same course of lead gone down in the 18. We sampled at Newton 114 tons 12 cwts. of blende. We are making every preparation for the engine.

WHEAL AGAR.—W. Roberts, Aug. 31: In the 50, east of Winstow shaft, the lode is 2 ft. wide, producing 2½ tons of ore per fm. The winze sinking under the 50 produces 4 tons of ore per fathom. In the 70, east of the engine-shaft, the lode is 1 ft. wide, producing stones of ore.

WHEAL ARTHUR.—T. Carpenter, Aug. 30: The flat-rod shaft is now going down speedily in a beautiful channel of killas, and I expect to reach the 40 in three weeks, and I doubt not that the north lode will be intersected previous to the next general meeting (end of October). The adit level is driven 8 ft. west on the north part, or branch, of Calstock Consols, or south lode, which is yielding nice stones of yellow copper ore; as the branches will come together in about 2 fms. more driving, I expect then a favourable change; driving by six men, at 4*l.* per fm.; air very good.—Eastern Mine, Old Lode: In the 20 east we have driven north by the side of the Gunnis Lake great cross-course 11½ fms., and, as the ground is altered and wetter, I suppose the lode is not far ahead. I cannot form an opinion as to what the heave really may be, as no level has been driven upwards; driving by six men, at 7*l.* per fm.—North Lode: In the 20 cross-cut north there are 6 feet more to cut the north lode, according to Mr. Webb's dialing. There is a good deal of water issuing from this end also; driving by six men, at 8*l.* per fm. The lode in the winze in bottom of adit west is 5 ft. wide, yielding saving work; down 3 ft., and sinking by six men, at 8*l.* per fm. The lode in the adit west is not yet taken down; driving by six men, at 7*l.* per fm. We weighed off the copper ore sold 19th August, 54 tons, 13 cwts. 2 qrs.

WHEAL CREBOR.—J. Giffard, Sept. 2: There is no alteration in either of the ends worthy of notice since my last. On the 1st inst. I set to drive both east and west, at 8*l.* per fathom.

WHEAL EDWARD.—M. H. East, Aug. 28: No important change has taken place in the mine since my last report. We weighed 93 tons 0 cwts. 2 qrs. copper ore Aug. 27, which realised, with carriage, 489*l.* 7s. 10d., and sampled 120 tons (computed) for Aug.

WHEAL EMMA.—W. Goldsworthy, Sept. 2: The engine-shaft continues to be sunk in beautiful mineralised ground, and the men are making good progress. In the eastern end we have taken down the lode reported as being dessed last week, and found the footwall part to produce 4 tons per fm.; to day, however, this part of the lode is not looking so well, a branch of spar having crossed the end and disordered it, which at present I only value at 1½ ton to the fm. We have not yet seen the south wall, but have cut in 3 ft., and find it orey throughout. In the 36 west there is no change: in the cross-cut south at the 34 we have met with several branches, all of which contain ore. Our tribute department is looking well, and the machinery in good working order.

WHEAL GRENVILLE.—George R. Odgers, Aug. 28: The engine-shaft is now down 8 fms. 4 ft. 6 in. below the 68; we have taken down the lode, which will average full 2 ft. wide; in the western end of the shaft the lode is a little disordered by a horse of granite, which appears to be wearing out again; and after looking at the droppers with the blue granite around the lode, I think we shall shortly see it improve, as this is the first place where we usually notice it. In the eastern end there is an orey lode, which, as I advised you in my last, if we were to open on it, it would produce full 1 ton of ore to the fm.; set to 9 men, 2 fms., at 22*l.* per fm. We shall resume the eastern end again next week at the 66, where the lode is from 2 to 2½ ft. wide, composed of a rubbly spar, a little gossan, &c., looking very kindly indeed—set to four men, at 2*l.* 15s. per fm. In the western end, same level, the lode is about 12 in. wide, composed of quartz, a little ore, gossan, and prian, also looking promising; set to four men 4 fms., at 3*l.* 15s. per fm. We are on the eve of holing the 10 winze with the rise above the 66, as we can distinctly talk to each other; as soon as we form the communication we shall commence the cross-cut north at the 66, which I hope to be in the early part of next week; set to six men, at 6*l.* 10s. per fm. The lode in the 54, west of the shaft, is about 14 in. wide, composed of a very nice looking spar, with spots of ore and mundic, the ground by it being a stiff granite. I am expecting to see it improve shortly; set to four men, 3 fms., at 5*l.* per fm. We have cleared up a shaft about 200 fms. west of the Newton engine-shaft, and we find a lode from 18 in. to 2 ft. wide, underlying north; this, in depth, will go out of our sett.

WHEAL HARRIETT.—S. Williams, Aug. 28: The 100 cross-cut is progressing very favourably; the ground is a little easier for driving. The lode in the 90 east is 2 feet wide, producing stones of ore. The lode in the 74 east end is divided with a horse of granite, and at present unproductive. The winze sinking below the 74 is not equal to last report; lode 4 ft. wide, worth for the length of the winze (12 feet) 60*l.* per fathom. In the stopes in the back of the 74 the lode is worth 15*l.* per fathom. The lode in the deep adit level is 1 ft. wide, producing 1 ton of ore per fathom.

WHEAL HENRY (Helvellyn).—J. Muse, J. Gledhill, Aug. 28:

shaft, is producing about 2 tons of ore per fm., of good quality. The 60, driving west of engine-shaft, is unproductive, lode at present split by a horse of killas; the 60 cross-cut, south from engine-shaft, on the cross lode, is driven about 2¼ fms.; this end has produced very good tin. The 40, driving west of flat-rod shaft, is in a kindly lode, composed of quartz, mundic, blende, and stones of ore, ground favourable for driving. We have commenced cutting plat at Michell's shaft, preparatory to sinking below the 20. We are getting on well in clearing the adit level through the old mine.

WHEAL TRELAWNY.—Wm. Bryant, Wm. Jenkin, T. Grenfell, Sept. 2: Smith's shaftmen are still engaged in cutting a plat in the 152. The lode in the 142, north of Smith's shaft, is 3 feet wide, worth 20l. per fm.; in the same level south the men are cutting through the slide. In the 132 north the lode is 3 feet wide, worth 12l. per fm.; in the 132, south of Chippendale's, it is 2 feet wide, worth 6l. per fathom. In the 120, north of Chippendale's, it is 2 feet wide, worth 7l. per fm.; in the winze sinking in the bottom of this level it is 2 ft. wide, worth 7l. per fm.—South Mine: Trelawny's shaft is sunk 6 fms. below the 142; the lode in the 142, south of the shaft, is 2 ft. wide, worth 8l. per fm.; the lode in the north end in this level is still unproductive. In the 130 south the lode is 3 ft. wide, worth 10l. per fm. In the 107 north it is 2 ft. wide, worth 7l. per fathom. The stopes and pitches are producing much as usual. We sampled on Saturday last two parcels of lead ores—No. 1, 85 tons; and No. 2, 60 tons; and 1 ton of copper ore, for sale on the 4th inst.

WHEAL UNION.—T. Glanville, Sept. 1: In the 20, east of the engine-shaft, the south lode is worth for tin 10l. per lm. In the 30 the lode is worth 20l. per fm.

WHEAL WREY CONSOLS (near Liskeard).—Peter Clymo, H. Hodge, R. Knapp, Sept. 2: The engine-shaft is sunk 2 fathoms under the 74. The lode in the 74 north is 4 feet wide, producing 7 cwts. of lead ore per fathom; in the same level south it is 3½ ft. wide, producing 6 cwts. of lead ore per fm. In the 64 north it is 1½ foot wide, producing 4 cwts. of lead per fathom; in the same level south it is 2½ feet wide, producing 5 cwts. of lead per fathom. In the 54 north it is 3 feet wide, producing 3 cwts. of lead per fathom; in the same level south it is 2 feet wide, producing 6 cwts. of lead per fm. The winze sinking under this level is at present suspended until the end is driven under it. In the 44 north the lode is 3 feet wide, producing stones of lead. The stopes and pitches are producing much as usual. We sampled on Saturday last two parcels of lead ores—No. 1 (computed), 37 tons; No. 2 (computed), 30 tons; for sale Sept. 4.

WHEAL ZION.—J. T. Phillips: In Moorshead adit we have cut a branch, or lode, it appears to rather hard, containing mundic, and a very small portion of yellow copper ore; as soon as we have cut through it you shall have more particulars. In the Glebe we have commenced driving south, from No. 1 adit shaft. The parcel of ore weighed 24 tons 3 cwts., value 91l. 2s. 8d.

WHITFORD.—J. Trevethan, Sept. 2: The shaft is now down from surface 26 fms. 4 ft. 6 in.; it is still without any change to notice, being of a light blue shale.

YARNER.—J. Hampton, Aug. 31: The western end in the 20 never looked better than it did yesterday, and the stopes are equally good. The lode appears to be coming in again at the 20 east of the slide. I broke out the best stone of ore from the end yesterday I ever saw in the mine. The 20 cross-cut is in good promising ground for copper. We set to the sumpmen on setting day 2 fms. stent, and not take down any lode until they had finished their bargain, but I rather think we shall take down what is standing in the shaft before the end of the month. The 10 east is improved, and the chances are we shall soon have a profitable lode there again. We have about 25 tons dressed, of better quality than the last, and we have increased the dressing pare.

— J. Hampton, N. Faull, Sept. 2: The 20 west, and stopes in the back of this level, were never better, if so good, before. The 20 east is fast improving; we have cut a branch of copper, from which the water is issuing very strong, and we soon expect an important improvement. The ground in the 20 cross-cut is beautiful white killas; we have not taken down any lode at the shaft for the week. In the 10 we have commenced driving north, and find the best part of the lode standing in that direction. We shall be able to give more particulars on this point next week.

ANGARRACK CONSOLS.—J. Barratt, Aug. 31: Since my last there is nothing new to report. Cox's engine-shaft is down 12 ft. under the 12, in stiff ground. The 12 cross-cut is in 7 fms. 2 ft. north from Cox's engine-shaft; this end is also in hard ground, which retards our progress a little. I hope when we intersect the north underlayer we shall have a change in the ground. Eaton's lode is within 4 fms. of this end, and I hope before the end of September, to intersect both the north underlayer and Eaton's lode.

LELANT CONSOLS.—W. Richards, Sept. 1: We have just completed our new shaft on the north lode, and are down to the 70 fathom level, where we are engaged cutting a plat and sinking for a fork. We find the indications favourable, and hope in about another month to cut the dry lode. In the western part of the mine we are still continuing to sink the flat-rod shaft below the 50 fm level, and we are driving the 60, east of Richards's shaft. In this part of the mine we have six tribute pitches, working by fourteen men, at an average of about 15s. in 1l. The new part of the mine will soon be opened, and I intend to send reports of our progress monthly. Hitherto we have had nothing particular to report, having been engaged almost entirely about our new shaft.

ROSEWARNE CONSOLS.—J. Richards, Aug. 31: The winze sinking under the 20 is holed to the 32, and will be completed in a few days, when we shall resume driving the 32 west, and hope to have a fair lode. At No. 1 shaft, on the elvan in the 10, we have driven a cross-cut 4 fms., and intersected three branches, two of which will pay to work on tributs. No alteration in any other part of the mine. I shall sell on Sept. 17 two parcels of fair quality ore.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

NORTH WALES LEAD MINES—THE RESULT OF PATIENCE AND PERSEVERANCE IN MINING.—East Pant-Du Mine, near Mold, Flintshire, is divided into 64 shares; quite a maiden trial in an extensive sett has been in operation, with the employment of only a few men, for seven years. Many of the shareholders being poor men, large operations were not suited to their means, although one shareholder, from original shares and purchases, now holds 33 64ths. Fine specimens of ore have been met with in the last twelve months, but within the last week they have broke into ore 6 feet wide, and one solid rock computed at not less than ½ ton. Shares, which might have been bought a few months ago for 25l. to 50l., are now held at 500l. per share. No discovery of late has caused so great a sensation in the neighbourhood as this.

RIBDEN MINE, NORTH STAFFORDSHIRE.—A meeting of the proprietors of this mine was held on Tuesday last, when a large number was in attendance, all of whom carefully examined the surface operations, and were well pleased with the progress made in so short a time; also with the good prospects which the mine already presents. After being fully satisfied with the appearance of the mine, &c., they returned to the Shrewsbury Arms, where the first general meeting of the company was held, and when it appeared that upwards of 8000 shares are already disposed of, the greater portion being taken up by the resident gentry, showing the good opinion held as regards the value of this property. The board of directors chosen are gentlemen of high standing and sterling worth, and in whom the greatest confidence can be placed. Assisted by their able secretary, Mr. J. D. Brunton, and Capt. Niness, the manager, there can be little or no doubt of the favourable results that await them.

DEVON AND COURTENAY.—At the last meeting of shareholders, on Aug. 24, there appeared a balance of 191l. 13s. 10d. in favour of the mine. No call was made, as the mine is now in a position to pay the working cost. They are also in daily expectation of cutting the lode good at the bottom of the mine, or 100 fm. level, which is looked forward to for good results; and no doubt this mine will shortly take a leading position in the Tavistock district.

ROSEWARNE UNITED.—This mine is likely to assume its former position, having met with a splendid course of ore 20 fms. below where they had their former riches. After passing through some poor ore ground the lode has again become rich, which shows the utility of perseverance in mining. This mine is only about 80 fms. deep, and having again met with the same shoot of ore at a deeper level, no doubt it will make a good and lasting mine.

ALVENNY MINING COMPANY.—The object of this company, whose capital is 17,000l., is to work the Alvenny, Fox Tor, and Red Hill setts, at Altarnun, each of which are of great promise. In the Fox Tor sett, ground has been laid open which will set at 5s. to 6s. in 1l. tribute as soon as the water is pumped out. The Alvenny sett has produced 30,000l. worth of tin at and above the adit level, although hitherto no machinery has been used. The Red Hill sett is further east, and offers great encouragement. They intend putting up a 50 in. engine immediately. It has been inspected by a competent authority, who approves of it. The prospectus appears in another column.

BRONFLOYD (near Aberystwith).—This mine is now making regular samplings of lead ore, and although the shareholders have had many difficulties to contend with, their extreme perseverance during the last six or seven years is now in a fair way of being amply rewarded. This is another instance of the oft-asserted opinion that the mineral riches of Wales are only partially developed. If a railway could be established so as to tunnel through some of the mountains of Cardigan and Montgomery, the lodes exposed thereby would, in all probability, go far to repay the outlay of such an undertaking, as, of course, the railway company would take care to be entitled to claim leases of the minerals at a low royalty, and, as the point of intersection of the lodes by these tunnels would be at great depth, such leases could possibly be realised for mining enterprise at high rates. The prosecution of Bronfloyd has been actively going on of late, and its deep adit, extending upwards of 300 fms., having now come well under the old workings (which has been the point of attraction from the character of its lodes partially wrought upon from surface in olden times, and accredited to the late Sir Hugh Myddleton), and as the result of those anticipations are now realised 30 fathoms from surface, it is intended, immediately the new adit is up, to proceed with sinking the No. 2 shaft, and as stated by Capt. Barbery in January last, "a few fathoms greater depth will, I consider, find the north and south lodes together." They are large champion lodes, one dipping south, and the other north, and thus a fine consolidated lode is expected at deeper levels; meanwhile, as will be seen by the monthly report in another column, the ground above and about the adit is yielding upwards of 20 tons of rich ore per month. We congratulate the shareholders, who from their great perseverance deserve every possible success.

SOUTH LADY BERTHA.—The improvement in this mine continues, the lode yielding 8 tons per fm., with every prospect of its continuing to the 40. Capt. J. Richards will inspect the mine on Saturday, and his report will appear next week.

BALLYVIRGIN MINE.—Mr. John Hitchins having been appointed to inspect this property, the following is an abstract of his report:—The engine-shaft is sunk perpendicular to about 6 fms. deep, then on the underlie of the lode to the 18 fm. level, and below this it is carried down in the same line to the 18 fm. level. The lode near the shaft is divided into two parts with what is termed a horse between them. In the back, the stopes working yield copper, lead, and sulphur ore, but I fear not quite enough to pay. In the bottom the lode is better and more distinct; beyond this, the western part of the lode, to very near the present end, is small, and not over promising, until very recently, when it has assumed a much better character, being composed of soft rotten limestone, sulphur, and a branch of rich copper ore. At about 6 fms. from shaft is a bottom stope, in which that part of the lode is from 3 to 4 ft. wide, of coppery sulphur ore; the back also, on the other part, is productive, and likewise an intermediate level between this and surface will yield large quantities of sulphur ore, to be raised at a profit. In the end nearest the dressing-floors there is a very good indication, and stones of lead ore, of good quality, were taken up in my presence; at about the centre of this cutting is a bend, caused probably by the intersection of another lode, where very rich stones of copper ore were found. With respect to the general arrangements, I beg to state that the engine-shaft, although not in first-rate working order, could easily be rendered sufficient for such working as will for some time be required at a little cost, nor is it badly placed, and the pumps are fitted for their purpose. Upon a review of your underground prospects and products, the nature of the ore, the facility of working, cheapness of carriage to quay, and what can be done, I am fully of opinion that this adventure has now arrived at a paying state, if not to leave a profit.

SEAMLESS LEATHER COMPANY.—Mr. Charles Heneage, Cadogan-place, has petitioned the Court of Bankruptcy that this concern be wound-up; the matter is to be heard before Mr. Commissioner Fonblanque, on Sept. 15.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 3, 1858.

	£ s. d.
COPPER.	
Copper wire .....p. lb.	0 1 1¼-1 0¼
ditto tubes ..... „	0 1 1⅜-1 2
Sheathing & bolts .. „	0 0 11½- —
Bottoms ..... „	0 1 0-0 1 0⅛
Old (Exchange) .... „	0 0 10- —
Best selected....p. ton	105 10 0- —
Tough cake..... „	102 10 0- —
Tile ..... „	102 10 0- —
South American.. „	92 0 0-94 0 0
IRON.	Per Ton.
Bars, Welsh, in London..	7 0 0- —
Ditto, to arrive	6 15 0- —
Nail rods	7 10 0- —
„ Stafford. in London	8 0 0- 9 0 0
Bars ditto	8 10 0- 9 10 0
Hoops ditto	9 5 0- 9 15 0
Sheets, single	9 10 0-10 10 0
Pig, No. 1, in Wales ..	3 15 0- 4 15 0
Refined metal, ditto....	4 10 0- 5 5 0
Bars, common, ditto....	6 0 0- 6 5 0
Ditto, railway, ditto ..	6 5 0- 6 7 6
Ditto, Swed. in London.	12 15 0-15 0 0
In stock to arrive....	—
Pig, No. 1, in Clyde....	2 15 0- 2 17 0
Ditto, in Tyne & Tees..	2 19 6- 3 2 6
Ditto, forge.....	2 17 6- —
Staffordshire Forge Pig.	4 10 0- 5 0 0
Welsh Forge Pig	3 0 0- 3 5 0
LEAD.	
English Pig	21 5 0-22 0 0
Ditto sheet	22 5 0- —
Ditto red lead	23 15 0- —
Ditto white	27 0 0-30 0 0
Ditto patent shot	25 10 0- —
Spanish	20 0 0-20 10 0
American	none.

	Per lb.
BRASS.	
Sheets	10d.-11d.
Wire	10d.-10⅝d.
Tubes	12d.-12⅝d.
FOREIGN STEEL.	Per Ton.
Swedish, in kegs (rolled)	none.
„ (hammered).	20 10 0- —
Ditto, in faggots	22 0 0- —
English, Spring	18 0 0-23 0 0
QUICKSILVER .....p. lb.	0 1 11- 2 0
SPELTER.	Per Ton.
Foreign	24 0 0- —
To arrive	23 15 0- —
ZINC.	
In sheets	30 0 0- —
TIN.	
English, blocks 118	0 0- —
Ditto, Bars (in barrels)..119	0 0- —
Ditto, Refined 121	0 0- —
Banca 115 10 0-115 11 6	
Straits 114	0 0-115 10
TIN-PLATES.*	
IC Charcoal, 1st qua. p. bx.	1 12 0- 1 15 0
IX Ditto 1st quality „	1 18 0- 2 1 0
IC Ditto 2d quality „	1 10 0- 1 11 0
IX Ditto 2d quality „	1 16 0- 1 17 0
IC Coke ..... „	1 5 6- 1 6 0
IX Ditto..... „	1 11 6- 1 12 0
Canada plates ....p. ton	15 0 0-15 5 0
In London; 20s. less at the works.	
Yellow Metal Sheathing..p. lb. 10d.- —	
Wetterstedt's Pat. Met. ..p. cwt.	2 2 0
Indian Charcoal Pigs in London	— - 7 10 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—A fair amount of business has been transacted in metals, and although it appears prices have not even yet taken a decisive course, there is not that hesitation exhibited in executing orders that manifested itself some time ago, consequently sales are more easily effected and prices better supported.

COPPER.—The main feature that has transpired with regard to this metal relates to the recent decline of 5l. per ton on cake, and ¼d. per lb. on sheet and sheathing. The smelters issued circulars, on the 1st inst., of their intentions to sell at 102l. 10s. for cake, and 11¼d. per lb. manufactured, but how far this moderate declension in value will affect the demand has yet to be proved; the shipments lately have been large, and shippers may think that ¼d. per lb. is not sufficient margin to allow them to send further shipments to ports that appear already overdone; at the same time, it may meet the limits of a few orders in the hands of merchants, which may tend to stiffen the market by reducing the stocks held by smelters. The improvement that has been going on of late in the standard led dealers to anticipate, if anything, a change the other way, and instead of having a fall, we might have a rise; but it is quite certain that if the real state of the trade were taken into account no other decision than that above announced could be come to: 1d. per lb. at all times is a serious difference to make, and now that the smelters show by their actions that they are more ready to consider the effect that such heavy changes produce, it is to be hoped that gradual alterations are always more acceptable than wide fluctuations: speculators are the only parties who generally benefit by excessive changes.

IRON.—The slight advance obtained in the price of English iron has been maintained, the market closing with firmness at quoted rates. Merchant bars in London are now at 6l. 12s. 6d. to 6l. 15s.; Swedish bars at 12l. 10s. to 12l. 15s.; Staffordshire descriptions have undergone no alteration; Scotch pigs have somewhat declined, sellers quoting on 'Change m.n. at 54s. 3d., g.m.b., f.o.b. in Glasgow.

LEAD.—The market is quiet; sellers have made no alteration in prices.

SPELTER.—The price, after declining to 23l. per ton, at which a parcel of 50 tons was reported as sold for immediate cash, has advanced, and 23l. 10s. has been paid, since which a few parcels have changed hands at higher prices, varying from 2s. 6d. to 5s. per ton.

TIN.—A moderate demand only exists for English and also for foreign. Banca has changed hands at 115l. 10s.; Straits continue to be quoted at 115l.; fine soft quality has realised enhanced rates.

TIN-PLATES remain as last quoted.

THE TIN TRADE.—Mr. N. Breebaart (Goll and Co., Amsterdam), under date Aug. 31, writes:—The transactions since Aug. 1 have not presented any features of particular interest. The market during the early part of the month was dull, with an almost nominal price of 68 fl. Subsequently a decline took place to 67 fl. and 67½ fl., which had the effect of attracting the attention of buyers for England and the United States, and gave rise to transactions amounting to several thousands of slabs, at prices ranging between 67 fl. and 68 fl. Since the last public sale nothing whatever has been bought for the German markets, and the demand for France has also continued exceedingly quiet.

	1858.	1857.
The stock of Banca tin on warrants amounted on July 31 to.. Slabs	166,437	157,941
Deliveries in August	24,284	15,608
Stock on warrants this day	142,153	142,336
Stock in the hands of the Trading Society for their annual sale ..	21,416	14,734

The above figures show a stock of 142,153 slabs, from which, however, should be deducted 3000 slabs delivered this day, thus reducing the actual stock to 139,153 slabs. The present position of our market is decidely strong, confirmed by the sale of 500 slabs made yesterday at 68 fl. 20c. The deliveries during August have again been so extensive that, notwithstanding the large stock on hand at the time of the sale, the present actual stock is already reduced below that of last year at the corresponding period. We may, therefore, look with confidence for a firm maintenance of prices for the present; and with the prospect of an increasing demand for export, there is every probability of a further upward movement in quotations before the close of September.

LIVERPOOL, SEPT. 2.—The tone of our metal market continues to be steady, and for manufactured iron somewhat more encouraging. A considerable amount of orders has been given out for Welsh bars and for rails, the prices of which are steadily supported. Staffordshire iron is in moderate request, prices in the meantime being in favour of buyers. The business transacted in Scotch pig-iron has been on a moderate scale only, and prices are lower than they were on this day week. The shipments are again in excess, as compared with the corresponding week of last year, being 12,264 tons, against 9452 tons. A reduction in the price of copper to the extent of ¼d. per lb. on manufactured, and 5l. per ton on unmanufactured, was announced yesterday, notwithstanding the fact that a moderately good demand exists, and which is not likely to be increased by a reduction in price, such as is now declared. There is no alteration as regards English tin: the smelters have a fair supply of orders, sufficient to keep prices stationary. Tin-plates are rather easier to buy; the prices now being realised in the United States are not remunerative, and for the moment orders are not plentiful. In lead there is nothing of moment to report. The following are the quotations:—Iron: Merchant bar, 6l. 7s. 6d. to 6l. 10s. per ton.—Tin: Common block, 118l. per ton; common bar, 119l.; refined block, 121l.—Tin-plates: Charcoal, IC, 31s. to 32s. per box; coke, IC, 24s. 9d. to 25s. 3d.—Lead: English sheet, 23l. 10s. per ton; English pig, 21l. 10s.—Copper: Cake and tile, 102l. 10s. per ton; best selected, 105l. 10s. per ton; sheathing and bolt, 11¼d. per lb.—Yellow metal sheathing, 9¼d. per lb.—Steel: Blistered, 30l. to 40l. per ton; spring, 18l. to 24l.; cast and shear, 50l. to 60l. per ton.

GLASGOW, SEPT. 2.—Since our last report a decline has taken place in the value of pig-iron, a moderate amount of business having been done at between 55s. 3d. and 54s. 6d., usual cash terms. To-day we closed very quiet with sellers at 54s. 6d., fourteen days, and buyers 3d. under. No. 1, Gartsherrie, 58s. 9d.; No. 1, g.m.b., 53s. 3d.; No. 3, ditto, 53s. per ton. Shipments: Foreign, 6065 tons; coastwise, 6199 tons = 12,264 tons; same week last year, 9452 tons.

NEW YORK, AUG. 21.—There has been a steady enquiry for copper, but the supply being limited the transactions have been entirely confined to small sales, at 21½c. cash for Baltimore. There has been but little demand for new sheathing copper, the quotation being nominal at 26c. Refined ingot has been quiet, but firmer. A slight decline has taken place in yellow metal, last price being 21½c. to 22c. for six months: 200 lbs. of old boiler have sold at 20½c.; braziers copper is quoted at 31c., six months; while 200 packs of damaged Russian sheets have changed hands at 4½c. to 5¼c., cash. Scotch pig-iron continues firm; we note sale of 180 tons best brands at $23 to $23 25c., at six months; and 120 tons at $22 to $22 50c. cash; inferior brands can be obtained for $22, at six months. Bar iron is but little in demand, and the price remains unchanged, the quotation being—for common English, $45 50c.; Refined, $55 to 57 50c. Block tin is in good request, the prices still maintaining an upward tendency: 1800 slabs of Banca have sold at 28¼c. to 29c. cash; and 900 to arrive at 27¾c. Transactions have taken place in English tin to the extent of 5 tons, at 29¼c. per lb. for cash. Straits are firm; prices nominal. Tin-plates are in firm request, 3500 boxes ordinary brands, I.C. coke, having sold at $7 18¾c., six months; and 1500 of better qualities at $9 62½c. to $9 75c. In lead, we note sales of 40 tons refined Spanish, 85 62½c., four months; 500 pigs galena, $5 75c., cash. Bar, pipe, and sheet continue steady, at previous rates. Spelter is quiet, at 6c. to 6¼c.

During the week the MINING MARKET has continued very active, and it is generally considered that it has now attained a permanently healthy position; a large amount of business has been done, advanced prices have been in most instances realised, and the state of the metal trade is as satisfactory as could be desired. A reduction of ¼d. per lb. in copper has been announced, which will, probably, induce a larger number of transactions in the metal, and miners will derive the advantage of an improved demand, although the standard still remains good. At the Cornish sale on Aug. 26 the standard advanced 2l. 3s., as compared with the sale of the preceding week; at Swansea, on Tuesday, the advance upon the standard given on August 10 was 4l. 2s. 10d.; whilst at Pool, on Thursday, the decline was but 2l. 0s. 4d. The sales of copper ore in Cornwall during the quarter ending Sept. 30 will be less by some thousands of tons than for any preceding quarter during the past five years, so that it is not likely that a materially lower standard will be for some time offered. The principal mines continue to look well, although it is asserted that the Devon Great Consols are much poorer in the bottom levels, and that going down they have, altogether, a less promising appearance than they had twelve or eighteen months since. At Rosewarne United they have met with a good course of ore 20 fathoms below the ground from which they obtained their former riches. Devon and Courtenay Mines are now just paying cost; they carry forward a credit balance of nearly 200l. to next account. At the Tincroft meeting a dividend of 5s. per share was declared. At Providence Mines they have declared a dividend of 2l. per share, and carried forward 1432l. 14s. 5d. At Bedford United, the dividend was 2s. 6d. per share, and 642l. 14s. 3d. has been carried forward. At Grambler and St. Aubyn, a dividend of 2l. will be paid on Tuesday, and 3l. or 4l. in November; the profit will be equal to 4l., but it would not be advisable to divide so close; the mine looks exceedingly well. A new company (the Alvenny) has been launched for working three setts in the parish of Altarnum, Cornwall; the capital is fixed at 17,000l. An instance of the good fortune which so frequently attends perseverance in mining operations has been made known this week; at East Pant-Dhu, Flintshire, they have, after a series of minor improvements, cut into ore 6 feet wide; the result is that the shares have gradually risen in a few months to twenty times their former price.

The public, as anticipated, have been large purchasers of stock, on account of the low prices, which in many instances are considered below the real value of the respective properties. East Basset has been largely dealt in at 97½ to 100; the lode in the 80 is not yet cut, but daily expecting to do so; should a good lode be cut, which is looked forward to, the shares will rise considerably. Rosewarne opened on Monday at 41½ to 42½, buyers; and fluctuating a great deal, leave off 30 to 32½. East Russell have been greatly in demand at 5¾ during the week, and leave off 5¾ to 6. North Robert have also been in considerable demand at 35s. to 40s., chiefly by parties in the neighbourhood of the mine; a few weeks ago these shares were 27s. 6d. to 30s., sellers, at which price they were far below their value; we called attention to them at the time, and parties are now picking them up quietly; shares leave off 2⅝ to 2¾; West Providence, 1 to 1⅛; North Down rather flatter, at 1¾, sellers; West Grenville, 7s. 6d. to 8s. 6d. flat; Mary Ann, 44½ to 45½; Trelawny, 23½ to 24½, enquired for; West Seton in demand, at 270; Sortridge Consols, 21s. 6d. to 22s. 6d., and a large business doing in them; Great Wheal Vor in considerable request during the week at 2¾ to 3, and leave off at 3 to 3¼; Tamar Consols, 12s. 6d., and in demand; Camborne Vean, 1⅞ to 2; Basset, 190 to 200; South Frances, 202½ to 207½, rather in demand; the mine has greatly improved in the 104 and 114, and at each end there is a good course of ore. Weal Harriett, very flat at 18s. to 20s.; Grambler and St. Aubyn have been in request during the week at 140 to 145; the mine continues to look remarkably well. Wheal Margery have been dealt in at 12½ and 13; Spearne Consols, 2; Carvannall, 3½; Leeds and St. Aubyn, 4½; West Providence, ⅞ to 1; in Old Tolgus United a large business has been done at prices varying from 37½ to 42½; the ends are all in satisfactory condition for producing ore, and it is stated that the rise on the south lode is already worth 40l. per fm. for copper ore. United Mines not quite so firm, at 80 to 85; Great South Tolgus, 15 to 15½; Par Consols, 16½ to 17; East Tolgus, 50 to 55; Wheal Margaret, 59 to 61; Wheal Wrey, 2½ to 3; Great Alfred flat at 4, sellers; Ludcott, 29s. to 30s.; Wheal Edward, 3¾ to 4; Hingston Down, 3 to 3½; Tincroft, 3¾ to 4; Pendeen, 3½ ½ call paid; Grenville enquired for at 32s. 6d. to 35s.; Vale of Towy, 16s. to 18s. 6d., flat; Tolvadden, 5¾ to 6¼, in demand; Herodsfoot, 6¾ to 7¼; Carn Brea, 52 to 54; North Basset, 9¾ to 10¼, in demand; West Basset, 21 to 22; West Trevelvan, 24 to 26; South Basset, 4 to 4¼; Kelly Bray, 2 to 2¼; Trebarvah, 17s. 6d. to 22s. 6d.

In the COAL MARKET, great flatness has prevailed during the past week, there being very little demand for any description of coal. On Monday the prices were—For best Wall's End, 17s. to 17s. 6d.; best seconds ditto, 15s. 3d. to 16s.; manufacturers', 12s. 6d. to 13s. 6d.; Hartley's, 14s. 9d. to 15s. 6d. The number of ships at market being 77, of which 54 only were sold. On Wednesday, a slight advance took place, in consequence of the continued small supply, there being only 55 ships at market, of which number only 12 were left unsold. Yesterday, there were only 27 ships at market, of which number 22 were sold, the prices obtained being—Best Wall's End, 16s. 9d., 17s. 3d.; best second quality ditto, 15s., 16s. 3d.; manufacturers', 12s. 6d., 14s.; Hartley's, and steam coal, 15s., 21s.

COAL CONTRACT: 200 tons best anthracite, 200 tons Merthyr Duffryn, or Llangennech, steam, and 200 Wall's End coals, for the House of Correction, Wandsworth Common.

In SALTPETRE, great activity has prevailed, about 2000 bags having been sold during the week, previous prices being fully maintained; the quotations being 6 to 7 per cent. refraction, 44s.; 9¼ per cent. ref., 42s. 6d.; 3½ per cent. ref., 46s. 9d.; Bombay, 37½ to 42 per cent. ref., 33s. to 35s. 6d. The prices at the same period last year were—For Bengal, 6 per cent. and under, 55s. to 57s. 6d.; over 6 per cent., 54s. to 54s. 6d.; Bombay, 42s. 6d. to 44s.; British refined, 57s. 6d. to 58s. On Tuesday the French contract for 2200 tons was tendered for, and the whole amount taken up at about 45s. for 5 per cent. ref.

At Pool Ticketing, on Thursday, 3132 tons of ore were sold, realising 20,133l. 4s. 6d. The particulars of the sale were—Average standard, 124l. 17s.; average produce, 7⅞; average price, 6l. 8s.; quantity of fine copper, 230 tons 5 cwts. Particulars of the sales for the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Aug. 5	3754	£126 8	6¾	£5 17 0	£86 0
„ 12	4539	126 2	6⅞	5 8 0	83 11
„ 19	4361	128 1	6¾	5 6 0	84 12
„ 26	2719	128 4	6⅞	6 0 0	87 18
Sept. 2	3132	124 17	7⅛	6 8 0	87 9

Compared with last week's sale the decline has been, in the standard, 2l. 0s. 4d.; and in the price per ton of ore, 2s. 8d. Compared with the corresponding sale of last month the advance has been in the standard, 2s. 11d., and in the price per ton of ore, between 2d. and 3d.

The present quarterly sales of copper ore at the Cornish Ticketings, ending Sept. 30, will be some thousands of tons less than for any preceding quarter in the last five years. We regret to see that the highly respectable and long-standing firm of Freeman and Co. are nearly out of the market as purchasers.

At Swansea, on Tuesday, 1137 tons of ore sold for 11,379l. 10s.—The Berehaven Mines 433 tons, which realised 3895l. 14s. 6d.; Knockmahon, 145 tons, 1435l. 10s.; Cobre, 208 tons, 2154l. 14s.; Del Soto, 115 tons, 1781l. 7s.; Carmen, 37 tons, 472l. 13s. 6d.; Parys, 115 tons, 388l. 2s. 6d.; the Worthing (South Australia), 25 tons, 352l. 10s.; Wheal Friendship (South Australia), 12 tons, 240l. 6s.; Australian R., 7 tons, 157l. 13s. 6d.; Sydney, 19 tons, 212l. 1s.; Cape N.M.C.N., 4 tons, 90l.; Bampfylde

17 tons, 198*l.* 18s.—The next sale, Sept. 14, will be 1340 tons, from Cobre, Knockmahon, Berehaven, Spanish, British regulus, Molland, Cronebane, Tigrony, and Holyford. The particulars of the sale on Tuesday were:—Average standard, 113*l.* 5s. 9d.; average produce, 11¼; average price per ton, 10*l.* 0s. 2d.; quantity of fine copper, 128 tons 1 cwt. Compared with the sale on Aug. 10, the advance has been in the standard, 4*l.* 2s. 10d., and in the price per ton of ore, 5s. 5d. Of ore sold, 710 tons were British, and realised 5918*l.* 5s.; produce, 9¾; standard, 118*l.* 10s. 9d.; price per ton, 8*l.* 6s. 8d.; and 427 tons foreign, realising, 5461*l.* 5s.; produce, 14 7-16ths; standard, 107*l.* 12s. 9d.; price per ton, 12*l.* 11s. 1d.—The arrivals at Swansea include—From Bilboa, 105 tons of copper ore; from Aveiro, 150 tons of copper ore; from Algiers, 180 tons of copper ore; from Cammillas, 145 tons of zinc ore.

The Tincroft Mining Company have declared a dividend of 1500*l.* (5*s.* per share). The ores sold amounted to 7659*l.* 17*s.* 5*d.*, and the mine cost and merchants' bills were 5164*l.* 5*s.* 6*d.* The profit on the four months was 1495*l.* 11*s.* 11*d.* The balance of assets over liabilities was 4406*l.* 5*s.* 5*d.*, which, with the profit, 1495*l.* 11*s.* 11*d.*, make total assets, 5901*l.* 17*s.* 4*d.*

At East Pool Mine meeting, on Monday, the accounts showed—Balance last audit, 8*l.* 16*s.*; ore sold June 3, 1013*l.* 18*s.* 3*d.*; tin, Aug. 7 and 30, 453*l.* 17*s.* 1*d.*; water drainage from South Wheal Crofty, 60*l.*; half-year's property tax on dues and stamps, 23*l.* 11*s.*; old iron, 8*l.* 1*s.* 4*d.*=1564*l.* 3*s.* 8*d.*—Mine cost, June and July last, 387*l.* 12*s.* 2*d.*; subsist, July and Aug., 205*l.* 2*s.* 10*d.*; merchants' bills, 278*l.* 12*s.* 8*d.*; poor's and highway rate, half year due April last, 32*l.* 6*s.* 4*d.*; property tax on profits, dues, &c., ending March last, 35*l.* 15*s.* 7*d.*; dues, 82*l.* 14*s.* 6*d.*: leaving balance in favour of adventurers, 435*l.* 19*s.* A dividend of 320*l.* (2*l.* 10*s.* per share) was declared. The nett profit on the two months' working was 330*l.* 3*s.* 7*d.* The agent reported that there was a little killas at present in the bottom of the shaft. They hoped to hole the winze in the bottom of the 120, and to resume the sinking of the engine (or north) shaft before the next account.

At Ding Dong Mine meeting, on Monday, the accounts showed—Balance last audit, 341*l.* 6*s.* 2*d.*; mine cost, merchants' bills, and sundries, three months, 172*l.* 19*s.*=206*l.* 5*s.* 2*d.*—Ore sold, 96*l.* 9*s.* 6*d.*; sundries, 3*l.* 12*s.*: leaving balance against mine, 109*l.* 3*s.* 8*d.* A call of 1*l.* 10*s.* per share was made. Capts. J. Truran, Mathew Daniel, and Francis Blight, reported that there has been a general falling off in the tribute ground, and, consequently, the returns have been small; but there is an improvement in the 10, on the white lode, and also in the 50, on the new south standard lode. The number of men throughout the quarter have been 51 on tribute, averaging 2*l.* 11*s.* 9*d.* per month; and 29 on tutwork, averaging 2*l.* 3*s.* 2*d.* per month.

At Gawton Copper Mining Company meeting, yesterday (Mr. Mathew in the chair), the accounts showed—Balance last audit, 130*l.* 3*s.* 10*d.*; calls, 400*l.*; ores sold, 164*l.* 14*s.* 9*d.*=694*l.* 18*s.* 7*d.*—Mine cost and merchant's bills, May, 202*l.* 13*s.* 3*d.*; June, 154*l.* 2*s.* 1*d.*; July, 208*l.* 12*s.* 2*d.*; lord's dues, 19*l.* 17*s.* 4*d.*; leaving balance in favour of adventurers, 109*l.* 13*s.* 9*d.* The report of Capt. Gill stated that "since the last general meeting the 50 west has been driven 5 fms. 2 ft., and suspended until the rise is communicated with. The 50 east is extended 22 fathoms from the engine-shaft; the character of the ground at present is more favourable for the production of mineral; the lode is about 2 ft. wide, containing a great deal of mundic, and yielding occasionally good stones of copper ore. The stopes in the bottom of the 24, where the lode still continues large, from 4 to 5 ft. wide, is worth 12*l.* per fathom. I estimate the cost for the next three months at from 500*l.* to 550*l.*, including stores, dues, &c. Our sampling on Friday last is computed 92 tons, which, from the produce and present standard, including carriage, will realise about 260*l.* We have also on the quay from 120 to 130 tons of mundic ready for sale." The Chairman congratulated the meeting that no call was necessary. Mr. Hussey enquired whether they had sufficient to go on for the next three months. The Chairman considered they had, and by the next meeting they estimated the balance in hand would be 160*l.* The committee of management were re-elected. Mr. Watson stated that a fortnight ago he was twice underground, and the progress making was most satisfactory. He had never seen finer piles of ore at surface, and in the 36 a beautiful rack of ore was broken in his presence.

At Wheal Charlotte meeting, on Aug. 24, the accounts showed—Copper ores and tinstuff sold (deducting dues, 59*l.* 2*s.* 3*d.*), 1105*l.* 16*s.* 8*d.*—Balance last audit, 209*l.* 3*s.*; mine cost, May and June, 682*l.* 19*s.* 3*d.*; merchants' bills, 205*l.* 12*s.*: leaving balance in favour of adventurers, 6*l.* 2*s.* 6*d.*—the profit for the month being 215*l.* 6*s.* 6*d.* The estimated statement of assets and liabilities shows a balance in favour of the mine of 855*l.* 18*s.* 3*d.* Capts. Gundry and Hosking reported that the 42 fm. level, west of engine-shaft, and the 40, east of Trevelyan's shaft, were producing 1½ ton per fm.; No. 1 winze, below the 30, was worth 18*l.* per fm.; No. 2 winze, 10*l.* per fm.; and the 40, west of Trevelyan's shaft, 15*l.* per fm.; while the stopes in back of that level were worth 12*l.* per fm. The tribute pitches and tutwork ends were producing about their usual quantity of ore: 80 tons have been raised since last sampling.

At Wheal Addams meeting, on Monday (Mr. Bentley in the chair), the accounts showed a balance in favour of adventurers of 191*l.* 17*s.* 2*d.* Lieut. Watson, Messrs. Moore, Stewart, Torkington, and Bentley, were elected the committee of management, and the proceedings, which are reported in another column, terminated with a vote of thanks to the Chairman.

At the River Tamar Mining Company meeting, on Monday (Mr. Alfred Smee in the chair), the accounts showed a balance in favour of adventurers of 134*l.* 4*s.* 2*d.* The retiring director and auditors were reappointed

At Pendeen Consols Mining Company meeting, on Tuesday (Mr. W. E. D. Cumming in the chair), the accounts showed a balance against adventurers of 549*l.* 8*s.* 5*d.* A call of 3*s.* per share was made. The committee of management were reappointed, and a vote of thanks to the Chairman terminated the proceedings.

At New Wheal Frances meeting, on Aug. 25, the accounts showed:—By call, 256*l.*—Mine cost, from Jan. to June, 167*l.* 14*s.*; merchants' bills, 165*l.* 5*s.* 7*d.*: leaving to debit, 76*l.* 19*s.* 7*d.* A call of 5*s.* per share was made. The salary of Capt. Charles Carkeek was increased to 4*l.* 4*s.* per month.

At the Trelyon Consols meeting, on Aug. 31, the accounts for April, May, and June, showed—Balance last audit, 143*l.* 7*s.* 1*d.*; labour cost, 381*l.* 19*s.* 6*d.*; materials, 124*l.* 0*s.* 7*d.*=649*l.* 7*s.* 2*d.*—By tin sold, 497*l.* 18*s.* 11*d.*: leaving debit balance, 151*l.* 8*s.* 3*d.* Proposals having been made for working Trelyon lower bounds, and the enclosed lands of Treluon, conjointly with the Providence Mines adventurers, during the term of their respective setts, each mine bearing an equal proportion of profit and loss, and Trelyon Consols receiving 10*l.* per month for the use of their engine for pumping, Messrs. Harvey and Co., Samuel York, R. H. Bamfield, William Cock, James Hollow, Richard Hidderley, and Francis Michell, were nominated a committee to assist the purser in carrying the proposal into effect.

At the Ribden Mining Company (Limited) first general meeting, held at the Shrewsbury Arms, Farley, on Tuesday (Mr. J. S. Richmond in the chair), Mr. Brunton (the secretary) read the notice convening the meeting. Mr. Daniel, of Cheadle (the solicitor), read the agreement with the proprietors of the mine, which was adopted and executed. The articles of association were then read and approved, and a special meeting ordered to be called for Oct. 27 to confirm the same. An auditor was appointed from among the shareholders, to receive two guineas for each audit. Capt. Nineas (the managing agent) was present, and explained to the shareholders the position and prospects of the mine, with which those present were much gratified. Several shareholders applied for an additional number of shares at the close of the meeting. A vote of thanks to the Chairman terminated the proceedings.

At East Gunnis Lake and South Bedford meeting, on Tuesday, the accounts showed—Balance last audit, 81*l.* 10*s.* 1*d.*; copper ore sold, 96*l.* 4*s.* 6*d.*; calls received, 806*l.* 8*s.*; carriage, 31*l.* 16*s.* 1*d.*=1015*l.* 18*s.* 8*d.*—Mine cost, merchants' bills, and sundries, 856*l.* 17*s.* 3*d.*: leaving balance in favour of mine, 179*l.* 1*s.* 5*d.* Captains Wolferstan and Phillips report that although the mine is still unable to meet the cost, the general prospects are good, and will be judged by the improvements that have taken place at the bottom level on north lode, in the 36 end east, on the south lode, also in the 20 end east, on the south lode, and in the same lode at Coward's shaft; and, from the present appearances of the different ends, they hope that the returns will increase.

At South Condurrow Mine meeting the accounts showed—Mine cost, merchants' bills, and sundries, 261*l.* 11*s.* 3*d.*—Balance last audit, 156*l.* 2*s.* 11*d.*: leaving balance against mine, 105*l.* 8*s.* 4*d.* A call of 6*d.* per share was made. Capts. Vivian and Thomas kindly offered to continue the superintendence of the mine without salary during its temporary suspension, and the purser will receive 2*l.* 2*s.* per month during the same period.

At South Lady Bertha meeting, on Tuesday, (Mr. W. Watkins in the chair), the accounts showed—Mine cost, Oct., Nov., and Dec., 1857, 87*l.* 7*s.* 11*d.*; ditto, Jan., Feb., and March, 92*l.* 7*s.* 8*d.*; ditto, April, May, June, and sundries, 411*l.* 9*s.*=591*l.* 4*s.* 7*d.*—Calls received, 317*l.* 17*s.*: leaving balance against mine, 273*l.* 7*s.* 7*d.* Capt. Goss reported that Sir Massey Lopes and his mineral agent had visited the mine, and expressed themselves satisfied at the time and manner in which the works have been so far completed; they were also much pleased to see the ore at surface. They will sample in September. The mine looks very well.

At Barf Mine meeting, on Wednesday (Mr. F. Fuller in the chair), the accounts showed—Capital paid up, 1250*l.*; lead sold, 176*l.*=1426*l.*—Mine cost, June, 1857, to June, 1858, inclusive, 1309*l.* 1*s.* 3*d.*: leaving balance in favour of mine, 116*l.* 18*s.* 9*d.* Capt. Mitchell reports that since the mines have been working by the present company, the operations have been principally confined to clearing up the levels, &c., so extensively driven by the former proprietors, who realised about 20,000*l.* from the lead stoped in the back of Laidlaw's level, which is driven into the hill 100 fathoms. This level is now complete, with tramway, wagons, &c., and ventilated throughout. The buildings, with dressing-floors and every convenience for working the mine economically, are complete. Seeing the value and extent of ground opened in this property, all of which is drained by adit levels, which must have cost above 10,000*l.*, besides the work of a lifetime, it is fair to anticipate several valuable discoveries from cross-cutting, and further developement of the lodes opened. There has been sold 176*l.* worth of lead, and they expect to sell 50*l.* within the next month.

At the Sithney Wheal Buller meeting, yesterday (Mr. G. Noakes in the chair), the accounts showed balance against the mine, 452*l.* 16*s.* 4*d.* A call of 5*s.* per share was made. The report of Capt. Gill stated: "We are stoping the bottom of the 70 fm. level, east of the north engine-shaft, on Metal lode, which is about 2 feet wide, and has yielded some good work for the stamps. I beg to recommend to you for the present to continue the driving of the 70 and 80 fm. levels a few fathoms further east to explore the lode, which will enable us to enter into calculations about exploring the mine to a greater depth, which we have not had time to do since we have received the notice of the meeting." Capt. Chappell's report recommended sinking winzes from the 50 to the 70, to prove the ground between these levels, and to ventilate the mine. "The sinking these winzes will supersede the necessity of driving the 60 fm. level eastward. The following I consider to be a proper plan for the future working of the mine:—As an engine is about to be erected at Wheal Metal, the necessity for using our engine for draining that water will soon cease to exist. At present there are no lifts in the shaft above the 50 to drain the water. It will, therefore, be imperatively necessary that lifts should be fixed as soon as may be convenient. I would advise sinking the present engine-shaft from the 80 to the 90, in a perpendicular direction, and then continue it on the cross-course, and on the course of the lode to the 80 fm. level, which we may nearly accomplish by the time Wheal Metal engine goes to work by having a full supply of hands." A resolution was passed that Mr. James, in company with Messrs. Hockin and Loam, inspect the machinery. A discussion, which lasted some hours, ensued, which resulted in Capt. Gill's report being received and adopted, and a resolution passed that the report of Capt. Wm. Chappell be received, and the various recommendations contained therein considered, and a calculation made of the probable expense and time required to carry them out, and a report be laid before a meeting, to be called in a month for the purpose of considering the same. The Chairman promised that by the next meeting he would make himself better acquainted with Sithney Wheal Buller, and request Capt. Gill to pay more attention to it. A resolution was passed, instructing the purser to write to all parties in arrear of call. A vote of thanks to the Chairman terminated the proceedings.

At the Wildberg Mining Company meeting, at Cologne, on August 28 (Mr. F. Twynam in the chair), Mr. Arthur Dean, the late engineer and superintendent, objected to a statement in the report (published in last week's Journal), that the amount of debts due to merchants in Germany proved to be much more than they were reported to be by him: he declined to take any responsibility for accounts of which he had never seen or heard. Mr. Dean contended that it was the duty of the present superintendent to have sent all accounts for liabilities incurred by him for certification before paying them; and it was, after some discussion, arranged that he should now proceed to Wildberg to examine the accounts. Upon the motion of Col. Hislop, an unanimous vote of thanks was passed to Mr. Dean, for the valuable information, he had afforded the meeting respecting the mines.

At the Quartz Rock Reduction Company meeting, on Monday (Col. Kennedy in the chair), it was stated that the object was to give the result of the yield of gold from 1 cwt. of quartz, half of which had been operated upon by Mr. G. R. Johnson and the other half by Mr. Squire. The quantity obtained by Mr. Johnson was, from compact quartz, 2 ozs. 5 dwts.: ferruginous quartz, 5 ozs. 3 dwts.: average, 3 ozs. 14 dwts. By Mr. Squire, five parcels of different qualities—No. 1, 2 ozs. 2 dwts. 12 grs.; No. 2, 2 ozs. 1 dwt.; No. 3, 4 ozs. 18 dwts. 12 grs.; No. 4, 4 ozs. 7 dwts. 12 grs.; No. 5, 1 oz. 17 dwts. 12 grs.: average, 3 ozs. 1 dwt. 9 grs. The meeting was again adjourned, and a vote of thanks passed to Mr. Squire, and also to the Chairman.

In Foreign Mines, there has been but very little doing this week. The North Rhine of South Australia continues to be the favourite, the shares being quoted at ⅛ to ¼ prem. Imperial Brazilian were more sought after, at a slight improvement upon previous prices, the last quotation being 1¼ to 1¾. The profit of the United Mexican Company for the month was $4021·57; 1854 cakes have been sold for $8851. For the shares there has been rather more enquiry, but no advance has taken place, the last price being 2⅞ to 3⅛. The Copiapo Company's mines continue much the same in appearance; they expect to take out an equal quantity (656 qtls.) next month. The Fortuna Mines are being steadily worked, averaging 1¼ ton per fm.: shares without change. The report read at the Wildberg Company's meeting, at Cologne, Aug. 28, states that the new winze now sinking in the bottom of the deep adit level, on the Erbteifstergang, will produce 3 tons of silver-lead ore per lachter; the ends driving east of the same lode, 25 cwts. of silver-lead ore per lachter; about 7 lachters more will reach the rich shoot of ore gone down above. The sinks and stopes in the Dornergang lode continue good. The end driving west from Michell's shaft has improved, yielding 1 ton of ore per lachter. Mr. Arthur Dean objected to a statement in the report, that the amount of debts due to merchants in Germany proved to be much more than they were reported to be by him. He contended that it was the duty of the present superintendent to have sent all accounts for liabilities incurred by him for certification before paying them; and it was, after some discussion, arranged that he should now proceed to Wildberg to examine the accounts. The Jamaica mine reports received by the last mail do not contain any information of importance. The shares are without alteration. The Linares Company's works are being actively proceeded with, the average yield being about 2 tons per fm. Preparations are being made for sinking Taylor's shaft for a 75 fm. level, and the San José to a 45 fm. level. The shares are quoted 9¼ to 9¾. Other shares continue at previous prices.

North Rhine shares (South Australia) have been much enquired for throughout the week, and some large purchases have been made at 3-16ths prem. The last quotation was ¼ prem., buyers.

From Leeds, our correspondents (Messrs. Gledhill and Co.) report that the mining market continues active, and several new mines are about being brought out; At Wet Groves Mine, the vein of lead cut is 3 ft. 6 in. in width, and is nearly solid ore. It has created a great stir. It is situate near the Keld Head, a large dividend-paying mine, which we previously referred to. At Merryfield Mine, a water-wheel has been set to work within the last three or four days; it is in connection with the crushing-mill, which greatly economises the labour, and answers well; it is 28 ft. diameter, and 2 ft. 6 in. breast, with an abundant supply of water. They are driving to a solid rib of metal, 14 in. wide, known to be about 30 fms., it being let for 25s. per fm. There are also three metal pitches let from 50s. to 60s. per bing. All other things are going on very favourably.

Our Hull correspondents (Messrs. Flint and Co.) state that they have had a dull week in their market for railway shares—very little business passing, and, as is usually the case under these circumstances, prices have a downcast tendency.

Our Sheffield correspondents (Messrs. Smith) regret they cannot report a more active market for mining shares. Eyam Mine declared a dividend last Thursday, and the works are looking well, which causes these shares to be decidedly firmer than of late. North Derbyshire done at 20s. Chapel Dale flatter, and sellers at 2½ pm. Other shares flat, and prices nominal.

We recently contrasted the results of capital invested in mines with money embarked in joint-stock banks; the half-yearly meetings of the seven metropolitan establishments having furnished data for our remaks. We then said that the position of the railway interests was so notorious that it required no particular comment, and we only recur now to the subject to draw attention to a statement put forth by Mr. John Grinstead, which shows the interest paid by the metropolitan railways, and therefore renders it an appropriate adjunct to our article on the London joint-stock banks. The ratio of nett profits to ordinary paid-up capital is 1·93 per cent. on the North Western, 0·45 on the Great Western, 1·29 on the Eastern Counties, 1·69 on the Great Northern, 2·19 on the South Western, 1·51 on the South Eastern, 2·51 on the Brighton and South Coast, 1·13 on the Blackwall, and 2·59 on the North London; the aggregate average being 1·67 per cent. interest paid on metropolitan railways ordinary stock. What a lamentable issue do these figures present, and yet there are still persons to be found to decry British mining, and to advocate railway extension. The total capital raised by these nine railways, in the shape of shares and loans, is no less than 113,745,865*l.* The North Western has received 34,784,431*l.* in this way: the Great Western, 23,787,476*l.*; the Eastern Counties, 11,242,062*l.*; the Great Northern, 11,444,404*l.*; the South Western, 9,921,570*l.*; the South Eastern, 11,596,013*l.*; the Brighton and South Coast, 7,858,815*l.*; the Blackwall, 1,782,068*l.*; and the North London, 1,329,096*l.* While on the statistics, it is important to show that the average ratio of total expenditure is 50·08 per cent.; being 50·97 per cent. on the North Western, 43·09 on the Great Western, 57·59 on the Eastern Counties, 55·73 on the Great Northern, 46·17 on the South Western, 51·82 on the South Eastern, 43·88 on the Brighton and South Coast, 42·82 on the Blackwall, and 49·27 per cent. on the North London.

AUSTRALIA.—The telegraphic intelligence from Australia, *via* Malta, gives dates to July 11, from Sydney; July 12, from Adelaide; and to July 16, from Melbourne. The import market at Melbourne was dull. The production of gold for the month was an average. One or two mercantile houses had suspended payment, but the names are not given. The London March mail had not arrived in due course, and had not been heard of when the *Emeu* left Port Phillip with the homeward mail. The Marseilles portion of the present mail is expected to be delivered this day.

AUSTRALIAN GOLD.—The statistics of the gold coming forward are interesting, the aggregate being almost unprecedently large. The advices brought by the *Emeu* to Suez mention that three more ships had sailed from Melbourne for England, with 672,300*l.* in gold. The subjoinet statement comprises the particulars of the whole of the remittances known to be actually at sea:—

Name.	Sailed.	Ont.	Ozs.	Value.
Hugoumont	May 20	103 days	33,500	£ 134,000
Avon	June 10	82 days	107,000	428,000
Sultana	June 24	68 days	40,500	162,000
Suffolk	July 3	59 days	79,992	320,000
Ocean Chief	July 13	49 days	47,594	190,400
Total			308,586	£1,234,400

BRITISH COLUMBIA.—The last Californian mail brings conflicting news from Fraser River, but everything tends to confirm the fact that there is no scarcity of gold. A gentleman from San Francisco went up Fraser River on purpose to see the condition of the gold diggings there. At Texas-bar he found 100 miners at work, earning from $10 to $20 daily. At Puget Sound-bar he found 75 men, earning from $8 to $10 a day. At Hills-bar he found 700 men at work, earning from $10 to $50 a day. At Fort Yale he found 200 miners, earning from $10 to $20 a day. Men also were working all along the river, who reported the diggings good. At Kells-bar, a fine log house had been erected. The river is slowly falling, and it is expected that shortly big strikes will be made. The banks are at present worked with sluices and rockers. The river abounds in fish. A month's and two months' provisions were on hand at the various diggings.

GOLD IN GEORGIA.—Some extraordinarily rich specimens of gold-bearing quartz have recently been found on a fraction on Chestatee River, a short distance below Bearden's Ford. Messrs. Hendrix and Varnum's mines are likewise yielding rich mineral of the same description.

THE MERTHYR AND ABERDARE STEAM COAL TRADE.—On Saturday an important and influential meeting of colliery proprietors, merchants, and shippers of Merthyr and Aberdare steam coal at the port of Swansea, was held by adjournment at Neath—Mr. George Insole in the chair. Officials from the South Wales Railway Company and Vale of Neath Company were sent by their respective boards to meet the gentlemen assembled, and to answer any enquiries in their power. The meeting being of a private character, of course the representatives of the press were not present; but we understand that after considerable discussion the fixed difference of cost of steam coal at the ports of Cardiff and Swansea was admitted. Resolutions were then come to, urging on the two carrying companies the great importance of enabling the shippers of Swansea to place coals free on board at Swansea at the same figure as the Taff Vale enabled the shippers at Cardiff to do. A resolution was also adopted by which the charge of 1½d. per ton now paid by the shipper shall, after the 13th inst., be charged upon the vessel, as is at present done in Cardiff. From the excellent spirit which pervaded the meeting, a general impression obtained that the desirable object sought will be liberally met by the railway companies. The meeting will be again summoned as soon as the railway companies intimate the determination they have come to in the matter.—A report was also read to the meeting touching the facilities to be afforded to the coal trade in the new docks now in course of construction at Swansea; also the placing of weighing machines on the existing South Wales drops and those to be placed at the new docks. This report was most satisfactorily received, and if carried out, will prove of the greatest advantage to this most important trade.—*Cambrian*, Sept. 3.

QUICK PASSAGE FROM GALWAY TO NEW YORK.—The *Prince Albert* (3000 tons), one of Mr. Lever's new line of mail packets, trading between the above places, left Sandy Hook at four o'clock, P.M., on the 21st ult., and arrived at Loop Head, Galway, at six o'clock on Tuesday evening, having performed the voyage in 10 days 2 hours. It appears that notwithstanding the short time occupied in performing the passage, there is reason to believe that the next voyage will be performed in a still shorter period, as she was obliged to be stopped occasionally on account of hot bearings; it is also reported that her coals were bad.

IRON MANUFACTURE.—All interested in the make or use of iron should read Mr. Rogers's new work on *Iron Metallurgy*:—

"I do not hesitate to say Mr. Rogers's work is the most complete combination of sound science and sound practice that has yet appeared on Iron—beyond comparison."—DAVID MUSHET.—Published at the *Mining Journal* office, 26, Fleet-street.

LEAD ORES.

Sold by the MINERA MINING COMPANY, on September 1.

Mines.	Tons.	Price per ton.	Purchasers.
LOT 1	110	£12 19 0	Newton, Keates, & Co.
2	110	12 18 0	ditto
3	18	12 11 6	Adam Eyton.
4	19	12 17 6	ditto
5	11	9 10 0	ditto
Sold on the 30th August.			
East Logylas	110	13 3 0	Walker, Parker, & Co.
Cwmystwith	100	13 1 0	Panther Company.

BLENDE.

Sold by the MINERA MINING COMPANY, on September 1.

LOT 1	25	£ 4 2 0	R. C. and W. Wright.
2	25	4 2 0	ditto

BLACK TIN.

Sold on the 27th August.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Great Wh. Vor	18 17 3 27	£69 10 0	£1313 10 3	—Mellanear.
ditto	3 10 0 5	62 0 0	217 2 9	ditto
ditto	18 15 1 21	69 10 0	1304 13 0	—Chyandour.
ditto	3 5 3 20	62 0 0	204 7 6	ditto
Wheal Bal	3 17 1 13	64 10 0	249 10 0	ditto
Sold on the 28th August.				
Great Wh. Busy	10 6 3 26	—	608 15 10	—

COPPER ORES.

Sampled August 11, and sold at Swansea August 31.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Berehaven	125	9⅝	9 0 0	Del Soto	30	16⅞	£15 1 6
ditto	123	9⅝	8 12 0	ditto	2	14⅞	13 7 0
ditto	114	9⅝	9 0 0	Carmen	37	14⅜	12 15 6
ditto	71	11	9 13 6	Worthing	25	15⅛	14 2 0
Cobre	115	11¾	10 8 6	Sydney	17	12⅜	10 17 0
Knockmahon	87	12⅜	11 2 0	ditto	2	16¾	13 16 0
ditto	93	12	10 10 8	Bampfylde	17	13⅜	11 14 0
ditto	58	9½	8 2 0	Wh. Friend.	12	22¼	20 0 6
Parys	115	4½	3 7 6	South Australia			
Del Soto	44	17⅜	15 19 0	Australian R.	7	24½	22 10 6
ditto	39	17¼	15 8 0	Cape N.M.C.N.	4	25¼	22 10 0

TOTAL PRODUCE.

Berehaven	433	£3895 14 6	Sydney	19 — 212 1 0
Cobre	208	2154 14 0	Bampfylde	17 — 198 18 0
Knockmahon	145	1435 10 0	Wh. Friendship, South Australia	12 — 240 6 0
Parys	115	388 2 6		
Del Soto	115	1781 7 0	Australian R.	7 — 157 13 6
Carmen	37	472 13 6	Cape N.M.C.N.	4 — 90 0 0
Worthing	25	352 10 0		

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Copper Miners' Company	195	£2125 6 0
Sims, Willyams, Nevill, and Co.	63½	1002 2 9
Vivian and Sons	157	1441 3 0
Williams, Foster, and Co.	210	2182 6 0
Mines Royal Company	58	469 18 0
Mason and Elkington	48	840 9 6
F. Bankart	239	1151 0 0
Charles Lambert	166½	1167 7 6
Total	1137	£11,379 10 0

Copper ores for sale at Swansea, Sept. 14.—Cobre 102, 89, 49, 48, 12, 101, 100, 9—Knockmahon 109, 91, 66, 28—Berehaven 124, 97—Spanish 83, 47, 10, 4, 2—British regulus 54, 22, 14, 3—Molland 35—Cronebane, 13, 2—Tigrony 2—Holyford 13, 11=1340 tons.

AVERAGES.

	Produce.	Price.	Standard.
British	9⅜	£ 8 6 8	£118 10 9
Foreign	14 7-16	12 17 1	107 12 9
Sale	11¼	£10 0 2	£113 5 9

Totals—British, 710; Foreign, 427=1137 tons (21 cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	8⅝	£ 7 12 6	£114 9 6
Foreign	13⅛	11 13 6	106 2 0
Sale	10 11-16	£ 9 9 6	£109 15 6

Totals—British, 1165; Foreign, 980=2145 tons (21 cwts.)

COPPER ORES.

Sampled Aug. 18, and sold at Mayne's Hotel, Pool, Sept. 2.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
South Wheal Tolgus	94	£6 10 6	Wheal Basset	54	£6 9 0
ditto	90	6 10 0	ditto	43	17 14 6
ditto	84	4 10 0	ditto	42	6 1 0
ditto	66	5 11 6	ditto	41	15 17 6
ditto	52	9 10 6	ditto	38	5 7 6
ditto	44	21 5 0	ditto	33	6 18 6
ditto	29	3 2 6	ditto	24	3 1 6
ditto	22	20 5 0	Trevoole	70	4 18 6
South Frances	90	2 14 6	ditto	50	4 18 6
ditto	82	5 13 6	ditto	33	2 17 6
ditto	52	8 0 6	ditto	25	12 10 6
ditto	49	4 19 6	ditto	20	2 13 6
ditto	43	5 3 6	ditto	16	3 10 6
ditto	38	5 9 6	Wheal Seton	23	5 2 0
ditto	34	4 4 6	Pendarves	59	4 6 6
ditto	16	20 4 0	ditto	47	6 5 6
North Roskear	82	4 17 6	ditto	32	5 7 6
Enys	57	7 2 0	ditto	19	2 2 0
ditto	46	2 0 6	ditto	12	13 16 0
ditto	36	11 1 0	Pembroke & E. Crinnis	98	4 16 6
Pendarves	56	5 6 6	ditto	43	5 7 6
ditto	55	4 3 6	ditto	33	3 1 6
ditto	35	0 8 6	Copper Hill	52	4 10 6
Basset and Praed	28	5 7 0	ditto	37	11 17 6
Wheal Clifford	120	7 0 6	ditto	36	9 0 0
ditto	80	4 7 0	North Crofty	35	4 13 6
ditto	50	4 8 0	ditto	34	5 11 0
ditto	45	13 7 6	ditto	20	1 14 6
ditto	40	3 6 0	Duke of Cornwall	65	2 8 6
West Wheal Seton	86	2 10 0	Wheal Harriett	36	4 13 0
ditto	62	6 1 6	ditto	9	16 16 0
ditto	61	12 13 6	West Par Consols	16	13 7 0
ditto	60	6 13 6	ditto	14	2 12 6
ditto	39	12 1 0			

TOTAL PRODUCE.

South Wh. Tolgus	481	£3910 14 6	Wheal Seton and Pendarves	192 £1038 18 0
South Frances	404	2269 2 0	Pem. & E. Crinnis.	174 805 9 0
No. Roskear, Pendarves, & Basset and Praed	395	1985 17 0	Copper Hill	125 998 13 6
			North Crofty	89 386 16 6
Wheal Clifford	335	2144 17 6	Duke of Cornwall	65 157 12 6
West Wh. Seton	308	2235 5 6	Wheal Harriett	45 318 12 0
Wheal Basset	275	2522 0 6	West Par Consols	30 250 8 0
Trevoole	214	1108 18 0		

Average Standard .....£124 17 0 | Average Produce 7⅜
Average Price per ton.....£6 8 0
Quantity of Ore.....3132 tons | Quantity of Fine Copper, 230 tons 5 cwts.
Amount of Money.....£20,133 4 6
LAST SALE.—Average Standard.....£128 4 0.—Average Produce 6⅜
Standard of corresponding sale last month, £126 8 0.—Produce, 6¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	82	£ 376 13 0
Vivian and Sons	418½	3852 7 0
Grenfell and Sons	474⅛	2744 8 6
Sims, Willyams, Nevill, and Co.	326⅝	2211 9 11
Williams, Foster, and Co.	620⅝	4296 4 8
Mason and Elkington	287⅞	2117 15 6
F. Bankart	290½	1296 5 3
Copper Miners' Company	264½	1047 1 8
C. Lambert	128	490 17 0
Newton, Keates, and Co.	183	1387 10 0
Alkali Company	76	332 12 0
Total	3132	£20,133 4 6

Copper ores for sale on Thursday next, at Tabb's Hotel, Redruth.—Mines and Parcels.—West Basset 576—Wheal Buller 431—Alfred Consols 371—Wheal Margery 329—Tolvadden 311—North Basset 252—Great South Tolgus 218—Par Consols 209—Great Wheal Alfred 203—Wheal Unity Consols 122—West Alfred Consols 119—South Crenver 81—Carrack Dews 68—Wheal Anna 66—Wheal Agar 62—West Fowey Consols 54—Tretoll 54—Cliljah and Wentworth 27—Treviskey United Mines 22—Rosewarne Consols 17—Lewis Mines 15—Halamanning 11—West Providence 10.—Total, 3628 tons.

NO SALE on Thursday week, 16th Sept.

FIRST SALE IN SEPTEMBER.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1849	3810	7⅞	£20,549 12 6	£103 3 0	£68 8 0	£79 10
1850	3988	7½	20,542 19 6	104 13 0	68 5 0	79 10
1851	3505	7⅝	17,544 5 0	102 2 0	65 19 0	84 0
1852	3295	6½	19,744 4 0	134 2 0	92 6 0	102 10
1853	2655	6½	15,438 7 0	132 3 0	89 15 0	107 10
1854	2585	5⅞

THE PROGRESS OF MINING IN 1857, BEING THE FOURTEENTH ANNUAL REVIEW.
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Notices to Correspondents.

*** Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

CONDURROW MINE.—In the Journal of Aug. 21, we stated, on the authority of a correspondent, that the mine not being at present so profitable as heretofore, several of the shareholders were getting dissatisfied. The purser complained; and, at his request, we at once made a correction in the amount of sales for the two months. In publishing the opinion of our correspondent, it, of course, should not be supposed that we wished to convey injurious insinuations against the purser, individually; that was far from our intention—indeed, what we endeavour always to avoid; and had his character for competence as a practical miner not been so well known we should have stated this in our first notice.

REDUCTION OF MINERALS.—Not a week elapses but we read in the *Mining Journal* that some gentlemen have taken out patents for the reduction or sublimation of ores, and if the list of patentees is any criterion, we must all be in a fair way to improvement. Unfortunately, however, it appears that scarcely any of those clever inventions has proved to be of any practical utility; and where such has been the case they have generally had their root in old books, as was explained by one of your correspondents with regard to a patent at present working in the neighbourhood of Plymouth. Messrs. Reid and O'Neil were about to introduce a new era in mining. The charges of dressing were to be avoided; the use of a little kelp, or some other alkali, was immediately to have produced copper of about 88 per cent. At Twiata, in Germany, large quantities, over 100,000 tons, lying at surface were to have been reduced at scarcely any cost. A patent for the process in practice there has been taken out in this country by Mr. Wm. C. Deely. It would be far more satisfactory to all those engaged in mining pursuits if they could see some of these wonderful projects carried out. Our smelters are generally considered keen people, and have a due regard to their own interests; yet we scarcely ever hear of their adopting any of these new-fangled notions, which are to save nearly all the present cost, and enrich all those who are so fortunate as to be connected with them.—T. P.

GREAT WHEAL BADDERN.—The letter of "A Shareholder of Many Years' Standing" has been received.

GREAT WHEAL VOR UNITED MINES.—Your valuable space has recently been entrenched upon to a considerable extent by correspondence that appears only to affect parties struggling for power, whilst the interests of shareholders, or information to them, would appear to be a secondary consideration. According to the report of the last meeting, inserted in the *Mining Journal* of June 19, Mr. Noakes, after a flourish as to the skill, energy, and attention of his nominees,—one praising the other,—stated he wished shareholders to understand that every information was open to them; in fact, it was a common partnership, and they were entitled to it. How far Mr. Noakes has carried this out, I shall prove by your columns. In the first place, I beg to inform you that a large body of the shareholders are resident here; and did Mr. Noakes mean that by every information being open to them we are to travel from Paris to the mines, or to Gresham House, to obtain it? I need hardly inform you that we have been wholly dependent on the *Mining Journal* for a report of the progress, similar to what we invariably had under the former management. The mine has been drained to the bottom, and that important fact is given in two separate reports, of five lines each, on Aug. 21, with the promise that the following week they hoped to give a more detailed report. Upon receiving my copy of your last Journal, I looked in vain for the promised intelligence. How long is this state of things to last? and how long are we to go on without information really interesting to the shareholders?—AN OLD SUBSCRIBER: *Paris*.

ROSEWARNE CONSOLS.—Mr. James Hollow is incorrect when he states that I wish to create a feeling of distrust in the present management; and, at the risk of having my letter denominated absurd, which is a favourite term with Mr. Hollow, I will venture to ask him whether he has never heard that when mines were managed in Cornwall private information has been transmitted to a dealer, so as to "bull" or "bear" the market? I have at times known that when pursers have held shares in a mine they have availed themselves of a favourable turn before they have apprised their co-adventurers of their reasons for so doing. As I before stated, for the purpose of speculation, unless the shareholders are in Cornwall, every mine which has not an office in London is in a comparatively bad position, as it would take at least three days before an answer could be returned as to the registry of a transfer. There are some gentlemen connected with the mining market who have offices in London, with their shareholders in different parts of the country, and yet hold their quarterly meetings in Cornwall on the mine. There are but few persons present, and the dealer and purser consequently have it all their own way. I do not infer that Mr. James Hollow would in any way countenance such proceedings; he must, however, know they are not uncommon. Were the offices in London we should be enabled to see Capt. James Richards's reports (the orthography and grammar of which, according to Mr. James Hollow, are not first-class) previous to their receiving the finishing touch and the sublime polish from the master hand of one who, it appears from his own showing, is a corrector of the diction of others. Modest men, it is said, of their own merits are dumb; and it is a questionable taste, in my mind, to laud our own learning at the expense of the supposed ignorance of others, who, if they have not the same amount of book knowledge as those in office above them, are possibly just as effective in the spot where they can be of the greatest practical utility to their employers.—P.

SAFETY CAGES.—It would be interesting to your readers to know what is to be done with a view to induce the proprietors of the colliery to which Mr. Dunn refers as the only one in which corves are now used—the Croft Colliery—to adopt safety-cages in their stead. Surely the improvement would cost but a very small sum, and the saving which would be effected would soon repay even that outlay. The breakage of coal would be much less, and considerably less power would, in my opinion, be required to bring the same quantity of coal to surface; to say nothing of the increased comfort which the colliers would derive from the change.—W. O.

ALUMINIUM.—We have heard of this metal being produced at the price of silver, iron, &c., but so far as I remember each statement has in turn been contradicted. Can any of your correspondents inform me the lowest price at which it has yet been obtained, and what it can be used for? as I can produce it cheaply and plentifully, by a very simple process.—R. C.

TELEGRAPHIC WIRE.—The cost of railway telegraphic wire varies from 21*l.* to 30*l.* per ton, which is sufficient for 5 miles. Some of the most eminent makers recommend wire at about 23*l.* per ton.

LONDON AND VIRGINIA GOLD COMPANY.—"Subscriber" (City).—The meeting will not be held on Wednesday next to finally wind-up this undertaking, in consequence of its being discovered that it was necessary to give 30 days' notice to every shareholder previous to legally passing the final resolution. Sending a proxy will be reckoned in the number to constitute a meeting the same as if the party attended.

PENDEEN CONSOLS.—"G. C." (Blackheath).—The affairs of this company were always considered to be well managed in the country by Mr. Greenwood; the accounts being produced in a very clear form, and the sole reason for removing the business to London arises from the fact of the principal shareholders residing there: one gentleman holding nearly half the mine, and the treasurer stated at the meeting, which is reported in another column, that out of a call made of 740*l.* he could see in the room adventurers who would, if necessary, pay 500*l.* of it the next day.

THE ATLANTIC CABLE.—Speaking in the sense in which the word is ordinarily used in reference to telegraphs, there is only one wire in the Atlantic cable, though it is really composed of seven slender wires twisted together.

DHURODE MINING COMPANY.—Since the appointment of trustees in November last, Mr. John Walker has done much for the creditors of this unfortunate concern. Finding that the other large holders would not enter into any arrangement for paying their fair share of the liabilities he petitioned the Court, and notwithstanding strong opposition Mr. Buckley was appointed master. The result of Mr. Walker's course is, that every creditor has been paid 20*s.* in 1*l.*, whilst otherwise they would not have received a shilling. Both shareholders and creditors may depend upon it that winding-up by the Court is, unless there be perfect unanimity amongst the shareholders, better than any other mode.—A CREDITOR.

SULPHURIUM.—Some time since Mr. Joseph Jones, of Bolton le Moors, asserted that he had discovered that sulphur was but the oxide of a metal. Has he prepared any further proofs that he is correct?—R. C.

LONDON TO PARIS BY WATER.—A few years ago you stated that a company was in course of formation for establishing a line of steamers between London and Paris, and I am convinced that large steamers of light draught could secure a very remunerative trade. There are many articles of commerce which it would be far preferable to bring over without the constant reshipment at present necessary; and if the company could carry passengers at the rate of 10*s.* or 12*s.* each, second class, they could likewise have a large quantity of passenger traffic.—D. A.: *Paris*.

CALSTOCK CONSOLS.—I see some remarks of "Looker-On" on Calstock Consols: the writer ought to have had some good foundation before venturing on observations so detrimental to the value of this property, and so opposed to the opinions of practical mining captains who have inspected this mine from time to time. I was lately induced to part with my shares in Tolvadden at a sacrifice, in consequence of the letter signed "Inspector." I hope, for the good of the adventurers, that his statements are unfounded. They were put very confidently, and as the results of his own personal examination; or he had no right to his *non du guerre*. Should they turn out to be false, he has inflicted a serious loss on myself and, perhaps, others who were influenced by his statements. I cannot help thinking that all reports on mines, and this may be considered as one, should bear the names of the writers; as if their statements are true they have a right to make them; and if false, they ought to bear the responsibility.—SPECULATOR.

SNAILBEACH MINES.—You were perfectly correct in saying, in your last week's Journal, that these mines are in the hands of a few individuals, and that the company is a private one. Your statement with regard to the amount of profits realised for many years past is, however, very far above the mark.—E.

FOREIGN MINING.—The manner in which the North Rhine Mining Company of Australia have had its shares taken must be very encouraging to the owners of other foreign and colonial mines, and I think it affords a satisfactory proof that the money market is in a more flourishing condition; yet the Cape of Good Hope appears entirely neglected. Being deeply interested in the welfare of that colony, and knowing the immense value of its mineral resources, I cannot help thinking that the present opportunity for bringing Namaqualand mines before the English public should not be lost.—G. G.

WEST SORTRIDGE CONSOLS.—I have been a shareholder in this unfortunate mine some three or four years, since which I have paid one or two calls; and now should be glad of a meeting of proprietors to definitively settle the business. Perhaps, Mr. Editor, through your Journal, some one interested may be able to inform me what steps are being taken to bring about this desirable state of things?—PUNCTUALITY.

REFUSE LEATHER CONVERTED INTO PAPER AND MILL-BOARD.—A company is in course of formation for carrying into effect an invention recently patented by Mr. Lichtenstadt, by which the refuse of leather, hitherto of but little value, is converted into a pulp, without in any degree deteriorating the strength of its fibre, suitable for the manufacture of mill-boards and wrapping papers. The supply of the material is stated to be ample, and the cost of the pulp, when in a fit state for the beating engine, for the manufacture of paper or mill-board, is estimated at 1*l.* 10*s.* per ton—the cost of ordinary materials used for like purposes is 10*l.* to 12*l.* per ton. Although the pulp might be applied to ornamental purposes, it is proposed, in the first instance, to commence with the manufacture of paper and mill-boards only, the necessary plant for which could be got into working order in a short time, and at a small outlay, affording an opportunity of testing the value of the invention before incurring large expenses.

"T. L." (Birmingham).—The offices of the Port Phillip and Colonial Gold Company are at 17, Gracechurch-street, London; and the secretary is Mr. Benjamin Wilkins.

WHEAL ZION.—I have long since expected to have heard some further report of the proceedings of this company. Mr. Price stated, some two years since, that it was his intention to wind it up forthwith. The last report states that we are getting to the Glebe land, and that it is the intention then to drive further south. Had this been done previously our prospects would have been better, and we should still have been upon your list, from which, I see by the last Journals, we are excluded.—D. H.

IMPERIAL BRAZILIAN MINING ASSOCIATION.—Some doubts are entertained as to the propriety of sending out Mr. Schofield to negociate the sale of the property, that gentleman being unacquainted with the language, laws, and customs of the Brazils. Mr. Schofield was one of the committee appointed on behalf of the shareholders to join the directors for the general benefit of the proprietors: the appointment, therefore, would appear to be judicious; and, from the straightforward manner in which the Chairman has hitherto conducted the proceedings, it may be fairly anticipated that he will not lend himself to any act that may merit disapproval, but persevere in effecting the best settlement. Some communication from the officials would tend to allay existing doubts, and perhaps remove all cause for distrust.—R. J.

GOLD REDUCTION.—Mr. James Jefferis, of the Loch Tay Mineral Works, Perthshire, writes that he has a new method of extracting gold, and one which, from want of proper apparatus, has not yet been properly carried out. He further states that the process is not a new one as regards chemistry, but the apparatus and method of application is so. With regard to the process of Mr. Squire, he observes that if the gold exists in an oxide, as that gentleman says, it would not require being brought into a metallic state by the process practised by Mr. Jefferis, but would work more advantageously. In his opinion, when Harris's magnets were rotating at the sole grand trial of the Chancellorsville Company, a part of the gold was lost, and the manager should inform the shareholders if he adopted any means to recover the gold dissolved. Much is lost in the washing and amalgamating processes, but the great failure in the separation of gold from quartz is owing to the simple fact that in too many cases it does not exist in the mineral; the consequence is that there is a large quantity of worthless stuff operated upon. Mr. Jefferis wishes to form a company to carry out his plans, but, at the same time, does not inform us what these are, neither does he afford any light as to his process, and, therefore, its utility and practicability merely rests on his own assertions.—H.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, SEPTEMBER 4, 1858.

The suspicions which more timid capitalists have hitherto felt, that there is great danger in connecting themselves with joint-stock companies, will be for ever removed by the verdicts which have recently been given against fraudulent, or, to use a milder term, careless directors; and shareholders may congratulate themselves that in the estimation of the public the concerns with which they are identified are yearly attaining a more elevated position. In the case of SCOTT *v.* DIXON, it is probable that Mr. DIXON (who is a member of the well-known firm ISAAC LOWE and Co.) had not the slightest intention to defraud, but was simply fearful of the consequences which would inevitably follow the publication of the truth; he, therefore, became a party to the issuing of a report which could not fail to lead to inferences totally at variance with fact, and thus sacrificed a character which for honour, integrity, and truth had previously been without a stain, and above suspicion. In summing up, Mr. Baron MARTIN observed, that if it were possible to teach the people of this country experience at all, the result of the present trial would teach it to them; and if after that trial they would, with their eyes open, deal with banks of this sort, they ought to take the consequences upon their own heads. The bank had a subscribed capital of 1,000,000*l.*, and by its constitution the directors had the power of pledging the credit of the proprietors to the extent of every farthing they possessed on earth. One manager and two directors—three persons—had the entire control over the whole funds of the bank. His lordship pointed out to the jury that they must have it established not merely that the report was false, but that it was fraudulently made, with an intention to deceive. Again, they must be further satisfied that the fraudulent and deceitful statement was made with the intention of misleading the plaintiffs. This latter was the least important point, and if they believed the evidence of Mr. TINLEY, that every broker who applied could get a copy of the report, obviously for the purpose of exhibiting it to persons most likely to deal in shares, it would be then for the jury to say whether the report primarily made for the proprietors was not also made for the consideration of the persons wishing to deal in shares. The jury, after half an hour's deliberation, found a verdict for the plaintiffs of 142*l.* 9*s.* 6*d.*

Now, timid shareholders who may have been deluded by false reports might argue that, according to Baron MARTIN'S charge, the points must be so clear that many of the directors who had been concerned in the issuing of fictitious statements would escape with impunity; and directors, whose business as regards the management of a company is almost wholly confined to receiving the fees attached to their office, may strive to satisfy themselves that they are guiltless, because their part in the direction has been so insignificant; but shareholders on the one hand, and directors on the other, may rest assured that if a false report be issued there is very little trouble in throwing the onus upon those in power.

It may, therefore, be maintained that the effect of the decisions in the cases of SEYMOUR *v.* BAGSHAW and SCOTT *v.* DIXON, will be to prevent gentlemen with names only appearing in lists of directors, without intending to take part in the management—their responsibility being now acknowledged to be that of directors, or servants of the general body of partners, rather than that of simple shareholders. We may henceforth have men who have less attractive titles entrusted with the management of joint-stock companies, but we shall be more likely to have business men, and men not above the duties they have undertaken. Shareholders and capitalists will feel more confident that their interests are well cared for, and commerce generally will be materially benefited.

The report of Messrs. Z. COLBURN and A. HOLLEY, the Commissioners appointed by the American Association for the Improvement of Railway Machinery, has, after a thorough examination into the systems of construction adopted on this side of the Atlantic, been made, and the results obtained have been embodied in a very elaborate treatise,—"The Permanent Way and Locomotive Boilers of European Railways; with a Comparison of the Working Economy of European and American Lines, and the Principles upon which Improvement must proceed,"—which will be highly interesting, both to English engineers and English capitalists, more especially as the comparison of the two national systems will be found decidedly adverse to that of America.

The object of the commission being to obtain the necessary information to enable the Commissioners to offer suggestions for permanently improving the railway system of the United States, regardless of individual interests; and the duties having been confided to men of the greatest integrity, and enjoying the highest professional reputation, the utmost reliance may be placed in their assertions; so that even those who are inclined to draw conclusions opposed to the Commissioners, are ready to acknowledge the value of the investigation. The points of the first importance in discussing railway economy are undoubtedly the permanent way and the generation of steam; and it is, therefore, to these points that the Commissioners give the greatest amount of attention. The receipts and expenditure, consumption of fuel, loads, speeds, grades, economy, engineering, financial management, and chief features of each system are in turn discussed, and ample particulars are given to ensure success in the introduction of coal-burning locomotives; the details and peculiar advantages of each principle employed being sufficient for every purpose.

In another column we publish a *resumé* of the report, although it must be evident that, in such a summary, it is difficult to do full justice to a work which has engaged the attention of two experienced engineers for nearly ten months: we shall, therefore, resume our notices of the important subjects on which it treats as opportunity offers. We may add, that the Commissioners have taken a thoroughly practical view of the subject, and, doubtless, their report will do much to elevate the science of engineering to a position in America similar to that which it at present holds in Europe. The English will derive advantage from the report also; although, perhaps, not to an extent equal to the Americans, for as it may be supposed that Europeans are not in every respect superior, the benefit cannot fail to be mutual.

Efforts are now again being made to establish postal intercourse with Australia *via* Panama. The discovery of gold in the newly-organised territory of British Columbia is the "stalking-horse" used for this revival of a question long since set at rest by experienced men as inexpedient, and, indeed, as incompatible with progress. A deputation has had an interview with the COLONIAL SECRETARY on the subject, and purports to represent "a large number of the bankers, merchants, and other persons interested in the colonies of New South Wales, Moreton Bay, and New Zealand." We have, however, in vain sought for the name of any one "banker" or "merchant," or, indeed, any person to represent the British community identified or connected with the trade with Australasia. Each and all of the names given show that the project is one exclusively of New South Wales origin, and does not in any way represent the wishes and opinions of any other of the colonies than those of New South Wales and New Zealand. Truely "Moreton Bay" is set forth as a separate territory, whether intentionally or accidentally we know not; but, as the unwary might suppose that three colonies were represented on the occasion, we mention the circumstance of Moreton Bay being part and parcel of New South Wales, to show that only two had a representative at the colloquy in Downing-street on Monday last. It is said that 400 persons have signed the memorial; but what, surely, can be more self-condemnatory of the proposition than the fact that only 400 gentlemen can be found to testify in favour of a line of postal intercourse, which is said to be all-important by those who are interested in its establishment.

Mr. JOHN CLARE, of Liverpool, in his letter to a London contemporary of Thursday, says that he has examined the list of names, as appeared in the Exchange News Room in that port, and avers that the greater part of those who signed the Panama memorial do not know in which hemisphere Australia is; and supports this statement by pointing out the fact that these petitioners advocate a line of intercourse of 14,000 miles in preference to the existing one of 10,000 miles. Not only is this the fact, but the colonies which are moving in this matter are shown to be of comparative unimportance in a commercial sense. The Board of Trade returns demonstrate that New South Wales and New Zealand were recipients in 1857 of British goods to the value of only 3,507,304*l.*; whereas the most populous and important of the colonies—viz., Victoria, South Australia, Tasmania, and Western Australia—are satisfied with the existing route *via* Suez; and, which would never pay a shilling towards the subsidy for the Panama line, have a collective import trade from this country, which during last year amounted in value to 8,118,882*l.*, while, in addition, it is notorious that nearly the whole of the precious metals and the copper are exclusively from Victoria and South Australia, and constitute the bulk and chief value of the export trade of Australasia generally.

The scheme altogether is most utopian, as held in reference to Australasia generally, and although it may be desirable to establish a route *via* Panama to British Columbia, it by no means follows that it is one of utility to Australia. We have more than once alluded to the question of the Panama route, and at all times shown its impractibility in a commercial, expeditious, or economical sense. It really would seem that the proprietors of the Royal Mail (West Indian) Steam Packet Company are the originators of the present movement, and this appears to be the impression on the minds of all our correspondents. Certain it is that the Australian colonists do not advocate the plan laid down. A short time since, it will be remembered, we alluded to a general meeting held by the Australian Association, which represents the whole of the colonies, when a resolution was passed, by a majority of 3 to 1, declaratory of the opinion of the Assembly that the Suez route met every requirement of the colonies, and of the British merchants trading therewith.

Notwithstanding this clear expression of the views of the representatives of the various colonies, the memorialists for the Panama route declare—

"That whilst in deference to the wishes of the southern and western colonies of the Australian group, the route by way of Suez should be maintained, the interests of the northern and eastern colonies demand that a new route by way of Panama should be established, the mails being conveyed alternately by either route, so that each portion of the whole group may share equally the great advantage derived from being made the point of first arrival and of last departure of the mails."

How is this latter clause to be accomplished? We should be glad to know. How is Sydney to be made the first and last place of call? It may be the last, but will never be the first to receive European information. It has, in

fact, been demonstrated that the intelligence remitted by the subsequent mails *viâ* Suez will reach even Sydney before that dispatched the previous fortnight *viâ* Panama; and as to telegraphic intercourse, to which the memorialists refer in the 9th paragraph, and assert that 30 days would be sufficient for the receipt of intelligence by such means and the Panama route, it is clear that despatches will be received in 21 days *viâ* Suez, as soon as the line is laid down to Ceylon, for the completion of which the Red Sea Telegraph Company have taken powers and intend to effect; so that, supposing the vessels are employed between Point de Galle and Australia, three weeks will be ample for the conveyance of telegraphic messages between Australia and London; therefore four weeks and two days will be no boon or encouragement for support of the Panama route. Sir E. BULWER LYTTON received the deputation most graciously, as a matter of course, and expressed himself favourable to the proposed double line of postal communication; but a Minister necessarily is ignorant, to a great extent, of the *pros* and *cons* of the question, and is guided, more or less, in the first instance at all events, by what he gathers from the deputation itself; therefore, a general remark, such as made by the Colonial Secretary, is by no means indicative of the merits of the project, and shows how empty phrases are apt to pass as truths when delivered by the spokesmen of deputations with emphasis and effect. We believe that the Panama route is adverse to the interests of all classes interested with Australasia generally, and that none of the colonies, save those of New South Wales and New Zealand, will pay one shilling towards the necessary subsidy, and that the Colonial Secretary has been premature in expressing his approval of a postal route—*viâ* Panama, as far as the Australian colonies or British traders are concerned. The primary object of all postal intercourse is expedition, which the Treasury is sensible of, and to which the Colonial Secretary referred the deputation. All that is wanted to satisfy all persons connected with these dependencies, whether as residents or trading therewith, is an efficient and expeditious postal communication fortnightly *viâ* Suez.

A clever little *brochure* on "BOARD MANAGEMENT" has been sent to us as "an address to shareholders in search of a dividend." Its appearance is opportune. At no period in the history of public companies has the merits, and indeed necessity, of directors been more discussed, arising out of the extraordinary exposures which have been made on the one hand, and the still more extraordinary conduct of Chairmen and directors on the other. The spirit of the pamphlet before us is to deprecate the system of boards of management, and to contend that the business of every description of public enterprise would be more efficiently and economically conducted by a manager alone. The writer declares that his expressed opinions are the result of practical experience—not of theoretical idea. With reference to railways especially, he argues that the system has been on its trial, and has egregiously failed. Originally, the manager or secretary was part and parcel of the board—the one being legislative, the other executive; but in modern days, contends the writer, the secretary has sunk to be the mere recorder of the doings of the board. "The more active a board of the present day is, the more dull and stupid should a secretary be. If he is intelligent, he sickens at the absurdities they perform." There is certainly much truth in the words of the writer, and instances are repeatedly occurring where the force of the remark is demonstrated. He illustrates the point by reference to the case of "MOWATT *v.* the Great Northern Railway," where it transpired "that Mr. DENISON, the Chairman, had once said at a meeting that the secretary was simply their amanuensis; and yet, after the defalcations of their own nominee (REDPATH), they turned round on Mr. MOWATT as responsible, as though responsibility in this free country can ever exist without power, and as though a secretary is to be responsible for the *lâches* of a man in whose appointment he had no voice." Mr. CHARLES DICKENS says it is extraordinary what peculiar opinions men will express "when seated with a fatal clean sheet of blotting paper, a fatal clear sheet of writing paper, and two fatal clean pens before them."

The management of public companies is compared to the management of London clubs, than which it is contended nothing can be worse, and in nine cases out of ten pay the bills of the past year by the income of the succeeding one, while little jobs go on in almost every branch of expenditure; and so with boards of management generally, "not because," says the writer, "they are more corrupt than the rest of mankind, but because the shadow of a 'board' protects them from individual responsibility." "The remedy for the misfortunes of shareholders is to be found," says the pamphleteer, "in the removal of the board altogether. To work efficiently a commercial undertaking we must commence with a single and undivided responsibility, and follow that up by checks on the executive in financial matters which the machinery of public accountants and auditors places at our disposal." Thus it is that the writer expresses himself generally throughout the *brochure;* and, although we are not prepared to support his views in detail, we do not hesitate to say that there is a wide field for improvement and alteration in the system generally adopted in the management of public companies. No doubt if directors would interfere less, and throw greater responsibility on the manager, as the executive officer, better results would ensue to the shareholders; but the fact is, that many gentlemen consider that the mere appointment to the board as a director is a royal road to wisdom on all points, and will insist on exercising their authority on points of detail with which they are utterly ignorant. Like DICKENS's model director, "Mr. Jupiter Bristles," they are often men fully impressed with the importance of their position, and never happy but when in the "board room," that not even the most trifling step may be taken without their sanction. The reward is the gratification of a sense of self-importance.

COLLIERY ACCIDENTS IN THE SOUTH WALES DISTRICT.

Within the last few years numerous colliery accidents of a serious and painful nature have occurred in the South Wales district. The world has not been startled by any single catastrophe of enormous magnitude, like that at Lund Hill, but so frequent and unceasing are the small casualties that the aggregate loss of life is scarcely less great. It is no exaggeration to assert that not a single week passes by without one or more fatal accidents occurring. Fresh deaths are constantly added to the long, dreary list, till at last they excite little observation even in the neighbourhood where the victims lived. An investigation necessarily takes place before the coroner, the Government Inspector attends, and the evidence in one case affords a sample of the evidence in all others. The general public hear very little of these incidents. There are thousands in this country to whom Wales is a *terra incognita*, and no part of the kingdom of equal extent is so disregarded by the press. Events there are as little heard of as though they took place in Central Africa. Even locally, loss of life in mines is regarded with indifference, or as a thing of course. The feeling which it is calculated to inspire is blunted by habit, and nothing more than a vague sentiment of pity is produced. It is not surprising that the results of this should be an inattention to, and not infrequently a palpable disregard of, the means which might be adopted to preclude the repetition of calamities so deplorable in their consequences. There appears to be an utter absence of a general determination to prevent the records of mining enterprise being so blood-stained as they now are. The evil might unquestionably be greatly reduced in extent if adequate exertions were made. It cannot be doubted that coroners and Government Inspectors do all in their power to search into the causes of accidents, and to defeat carelessness; but their success does not always correspond with their good intentions. The witnesses examined at inquests would often tell but one story if they could. Revelations of neglect would only inculpate themselves or their superiors, and the consequences in either case would be the same. It need scarcely be pointed out that the collier who provoked the enmity of his overlooker would speedily have cause to regret his conduct. Without going so far as to insinuate that in every instance a system of suppressing or evading the truth is adopted, or could be so with security, it may safely be affirmed that the circumstances under which an inquest is held are not favourable to the elucidation of a mystery which it is desirable to preserve by those who alone hold the secret. The jury is usually composed of men dependent for their very bread on those whose conduct they are to exonerate or blame. This constitutes a very powerful reason for their not wishing to penetrate too far below the surface presented them, and for repressing any tendency they might feel towards fault-finding. It might not prevent them seeing at all, but it would assuredly induce them not to see too far. Hence, one inquest on what is called an "ordinary" case is precisely like another, a rapid formality characterising the proceedings from beginning to end. The witnesses declare their ignorance of any neglect of duty, and as dead men tell no tales, the odium of the fault is cast upon the unfortunate person who has already borne the penalty.

While these facts are too well supported by the occurrences of every-day life to admit of refutation, it must still be allowed that many accidents take place which require no concealment, and which involve no blame. The labourer in mines must always be subjected to dangers which no human ingenuity or forethought can avert. A treacherous roofing may give way, or a sudden "fall," put an unforeseen and inevitable end to the life of the poor miner.

Some parts of the South Wales coal field are especially hazardous, and we are, therefore, prepared to hear of a larger number of accidents there than in securer places. The fiery mines of Aberdare involve an occasional sacrifice of life for which none, it may be, are responsible; but what we contend for is, that catastrophes which might have been avoided by proper precautions occur infinitely more frequently than those which happen notwithstanding the exercise of due care and vigilance. Whether the mischief arises from the recklessness of the collier, or the neglect of the agent, does not affect the argument; the cause of accidents in the majority of instances we maintain to be the disregard of principles which ought to be scrupulously observed. Many a man's life has doubtless been forfeited by his own temerity or blindness—by his contempt of danger, or wilful defiance of the laws which govern his safety. Safety-lamps are opened for the purpose of a better light, or to enable the miner to smoke, and his existence is sacrificed to his inconsiderate rashness.

In other cases the ventilation of a pit is so bad that it is absolutely a marvel that the men who work in it are not destroyed. This kind of "accidents" form the rule, pure accidents the exception. Unfortunately, a very striking proof of this has recently been afforded. The official investigation into the cause by an explosion in the Cyfing Pit, Ystalyfera, furnishes us with an instance where six lives were lost, and six families thrown into beggary, through the most manifest and flagitious carelessness. The details were given in our Journal last week, but it may be useful to recur to them for a more definite purpose.

Scarcely three weeks ago 12 men descended into the pit in question, bearing with them naked candles, in accordance with their usual practice. In the Swansea Valley this mode of working mines is common, and Mr. EVANS tells us that were the pits properly ventilated no danger need be feared, the quantity of gas given out being so small. It is evident, however, that where one important precaution is dispensed with greater regard should be paid to others. The actions of the men just before the explosion prove that the inattention—we had almost said the foolhardiness—of all concerned was carried to the utmost in every respect. Smoking was indulged in; sparks, as a matter of course, flew about, and in a few minutes six of the party were laid mangled and dead, the remainder having a very narrow escape. The fault of the whole misfortune rests, as the evidence irresistibly proves, with the manager, REES THOMAS. He had never given the men copies of the rules; he neglected to see that the person appointed to inspect the pit every morning did his duty, and his knowledge of the ventilation of the colliery is proved to have been imperfect in the extreme. He probably knew less about it than the dullest of his men. He declared that, in his opinion, it was so perfectly safe that he did not even think it necessary to distribute rules—in point of fact, that the men might be allowed to do anything in any manner they pleased. Yet Mr. EVANS states, and Mr. LIONEL BROUGH substantiates him, that little or no provision was made to ventilate one portion of the colliery—that with such a system accumulations of gas were sure to take place, and that the condition of the colliery tended to cause accidents generally. Moreover, the same gentleman asserts that the immediate cause of the explosion was the pit not being inspected in the morning—a *laches* attributable to REES THOMAS. Never, surely, was the entire management of a colliery condemned in terms more explicit than these. Not a single circumstance transpires to palliate the culpable carelessness displayed by the manager. His pit was little better in point of order than a tap-room, where the men could smoke, and perhaps drink (for there were no rules to break), as much as they pleased. Their conduct was not regulated in the slightest degree, and we can readily imagine how gladly they would turn to account the want of authority over them. But for the accident this might have concerned the proprietor of the pit alone; as it is, the matter is a public one, and the careless manager is open to universal censure.

GOLD.

Probably many of those adventurous prospectors who go roaming the world around in quest of "gold," that cherished emblem of riches from time immemorial, will lend incredulous ear when told that the coveted metal is widely diffused throughout nature. Few dominions of the world there are in which gold has not been extracted from the ground at some time or other. At home the Cornish tin miner amuses himself to this very day by collecting gold spangles, thinly distributed here and there amidst the less noble metal. Scotland has produced gold in much larger quantity. Ireland more generously still, though the mountains and river courses of Waterford, once so famed for their auriferous yield, furnish at this time not enough to be remunerative. As for Wales, the Principality has even dared, subsequent to the gold discoveries of Australia and California, to advance the gold-yielding pretensions, as many a speculator "down city-ward" would be able to testify with sad countenance and melancholy shake of the head. France, Sweden, Saxony, Hungary, Bohemia, can all lay pretensions to the possession of native gold. In Spain, the auriferous riches of the Darro and the Tagus in modern times have well-nigh equalled in repute the olden fame of Pactolus; but Russia, of all the dominions hereabout, bears away the palm of credit for being a gold producer.

Thus, without citing further testimony, the distribution of native gold seems to be very general in European regions. Directing our attention to countries further away, the fact could readily be borne out, that whilst lead, tin, and copper are localised as to their occurrence, gold is discernable far and wide. But how wide the distribution of gold has yet to be communicated. Chemists of good repute have asserted, and the assertion has never been contradicted, that the precious metal is discoverable in the roots of the violet and the stalks of the vine. Supposing this to be the case, one of two things must have happened—vines and violets must have created gold (which nobody believes), or gold must be distributed far more widely than any person (some flighty chemist here and there excepted) ever permitted himself to imagine.

Every now and then the village apothecary is accosted by some frantically excited old lady, who fancies she has discovered a lump of the precious metal in her coals. He tells her it is only a vile compound of iron and brimstone, totally valueless, though so beautifully gold-like and yellow. Curiously enough, however, and as if in vindication of the doctrine of signatures by virtue of which every natural body was assumed to bear external impress of its qualities and belongings, much of this iron brimstone compound (pyrites or sulphuret of iron) actually does contain gold, though so small in amount that it will not pay for extraction.

It is only in one geological formation, however, that gold asserts its majesty, and shows itself in quantities grateful to the eye of the miner. It loves to nestle in crevices of *palæozoic*, or ancient rocks. During the very earliest history of our planet, whilst yet the animals upon it were restricted to a few low marine forms, there, by some unknown operation of Nature, gold in considerable proportions began to lay its yellow filigree-work along the crevices of the rock. Thence disintegrated by the mountain rills, flowing without ceasing for some thousands of years, and rolling down into river beds, the accumulated gold spangles there lie resting until disturbed by the enterprise or the cupidity of man. Whether in Australia, California, or Columbia, the beds of rivers and streamlets are the places of greatest promise for gold. A considerable time before the auriferous capabilities of Australia were demonstrated, Sir R. Murchison had expressed his belief that considerable gold deposits might be found there, because of the similarity between the geology of Australia and the Uralian range.

The geology of Australia reveals an almost total absence of secondary rocks. The long and interesting series of European stratified rocks, amongst which the Wealden and chalk systems take such a conspicuous part, seem absent in Australia. Remembering the fact that the rocks thus absent are, when they exist, the result of aqueous deposition, the probability is suggested that Australia remained above the ocean whilst all other portions of our planet were at one time or other submerged, and that the existing animals of Australia are only types of races which have long since passed away. Fossil geology lends colour to this view. Imbedded in certain portions of the British oolitic system, and the same system in other parts of the world, are found animals of the kangaroo type—creatures only now found in Australia.

Proportionately little of the gold hitherto brought into commerce has been produced by mining operations, properly so called, and the gold mines known to fame are more like quarries than mines, in the ordinary acceptation of that term. The reason is twofold. Not only is gold so capriciously distributed that the ordinary intelligence of miners when seeking it is set at naught; but auriferous rock, or ore, does not kindly yield up its treasures, like other rocks and ores, by the operation of smelting. Something may be generally described as consisting of the solution by fire and flux of the stony impurities which envelope the metal. The result is a glass or slag which floats on the surface, whilst the metal sinks below, and is collected in the form of ingot or button. Necessarily, in conducting this smelting operation, some particles of metal are lost—a matter of no importance whatever when ordinary metals are concerned, but which has hitherto almost effectually defeated all attempts of extracting gold from its ores by smelting.

Amongst the various attempts that way, the general principle has been aimed at of combining some ignoble metal, such as lead or iron, with the gold; thus adding to its bulk, and admitting of ready subsequent separation. For a combination of reasons, the smelting operation when applied to gold extraction has seldom answered; hence, whenever the precious metal is distributed in particles too small for observation by the naked eye, some chemical process for laying hold of it and separating it has always been adopted. Amongst these processes amalgamation is generally the most used and most effective. It depends on the property which quicksilver has of dissolving gold, as water dissolves sugar; forming a metallic pasty mass, from which the mercury can be dissipated by heat, and the gold obtained pure. Immense quantities of quicksilver are used in this way, and also for the extraction of silver. Until within late years the greater quantity of quicksilver employed for these purposes was obtained from Europe (Spain and Carinthia). Recently, however, California so profuse in gold, has yielded, and still continues to yield, enormous quantities of quicksilver, so necessary for extracting it. Viewed under this aspect of easy and cheap quicksilver supply, the auriferous regions of the Pacific coast of North America present advantages over every other. The conditions desiderated by a gold miner, or rather a gold prospector, are peculiar. Fuel, the great necessity of all other metal-producers, he need not heed, except for his own personal wants, but water is a necessity. Without water he can only pick out such spangles as he sees—few and far between—amidst much rubbish. Aided by water and some form of washing apparatus, oftentimes no more elaborate than a bowl of wood or tin plate, he can, by manual dexterity, wash away particles of earth and stony sand, isolating the golden dust which remains behind. If the region be civilised enough to furnish him with the water also for making a cradle, much of the manual dexterity (so requisite with the simple bowl) is no longer needed. As abundance of water is indispensable to the gold prospector, so there may readily be in some cases too much; for example, when the gold field is situated in the bed of a stream. It is this continuity of sufficient water which has made California a more pleasant field of operations than Australia. What the Fraser River will turn out remains to be seen; but there is reason to believe that during several months its flood of waters will prove embarrassing to the miner.

BRISTOL SCHOOL OF MINES.

On Monday, at the Lecture Hall of the School of Mines, Bristol, the prizes awarded by Mr. Warington Smyth to the pupils and colliery overmen, bailiffs, &c., who passed a satisfactory examination in June, were distributed in the presence of a large number of coalmasters, colliery proprietors, and others interested in mining operations. Mr. J. Rolt, M.P. for West Gloucester, presided, and amongst those present we observed the very Rev. the Dean of Bristol, the Rev. Canons Moseley and Guthrie, the Rev. Gale, the Government Commissioner for investigating the state of mining populations; Lionel Brough, the newly appointed Inspector of Mines for the district; Professor Higgins; Handel Cossham, of the Parkfield Collieries; H. Bennett, managing partner of the Bedminster Old Coal Company; G. Leonard, of the Easton Collieries; R. Knight, of the Ashton Vale Colliery, &c. The following is the list of prizes:—

PUPILS.

GEOLOGY AND MINERALOGY.—First prize: John Williams, "Mining and Metallurgy," by Overman.—Second: John Sherbourne, "Geology of England and Wales," by Conybeare and Phillips.—Third: David Jones, "Geology, Mineralogy, and Crystallography," Orr's Circle of the Sciences.

ART OF MINING.—First prize: John Sherbourne, "Civil Engineering," by Mahon.—Second: John Williams, "Wonders of Science," by Mayhew.—Third: W. C. O'Reilly, "Mining and Mineralogy," by Overman.

STEAM-ENGINE.—Five prizes were given in this department to the following, who were all equal:—Henry Holt, "The Steam-Engine," by Russell; James Brain, "Steam Engine," by Lardner; David Jones, "Economy of Machinery," by Babbage; John Williams, "Combustion of Coal and Prevention of Smoke," by C. Wye Williams; John Sherbourne, "Weale's Dictionary of the Terms of Art."

SURVEYING AND PLAN DRAWING.—First prize: James Brain, a Manual of Surveying and a Box of Colours.—Second: John Smallcombe, a Box of Colours.

SATISFACTORY PROGRESS.—W. Parrish, G. Hemmings, and L. Edmunds.

A School Certificate to John Smallcombe.

COLLIERY AGENTS AND OVERMEN.

Mr. M. Rennolds, Bedminster, "Technology," by Knapp, 2 vols., and a Certificate of Merit in Underground Colliery Engineering.

Mr. Thomas Harvey, Easton, "Mining and Metallurgy," by Overman, for the Invention of a Safety-cage for Shafts, and a Good Knowledge of Underground Work.

The following also had prizes for a Fair Knowledge of Underground Work:—Mr. George Harvey, Easton, "Geology, Mineralogy, and Crystallography," Orr's Circle of the Sciences, and "Physics," by Lardner; Mr. Thomas Hemmings, Parkfield, "The Useful Metals and their Alloys," Orr's Circle of the Sciences; Mr. George Rich, Parkfield, "Popular Geology," by Lardner; Mr. George Davis, Parkfield, "Steam Boilers," by Armstrong; Mr. George Howard, Easton, "Common Things Explained," by Lardner; Mr. W. Tanner, Parkfield, "Practical Mechanics," Orr's Circle of the Sciences.

Mr. S. Nichols, Mr. W. Punter, Mr. C. Watkins, and Mr. George Jeffries, of Parkfield; Mr. William Brittan, Mr. William Hulbert, and Mr. James Isles, of Easton; Mr. George Smith and Mr. Samuel Elms, of Bedminster, also received prizes for Knowledge of Underground Work.

The PRESIDENT, having distributed the prizes, addressed the meeting on the subject of education, particularly commenting on the advantages of a special education for those engaged in a special calling. This he considered to be the main feature of the Bristol School of Mines, and therefore it was deserving of the support of the public.

The GOVERNMENT COMMISSIONER also addressed the meeting, and congratulated the promoters of the institution upon its establishment, they having outstripped the large mining districts of the North, by effecting that which the coalmasters of Northumberland and Durham were considering whether they ought to carry out—the formation of mining schools. He looked upon that institution as one of the greatest importance, and as well deserving the support of those connected with mining, and of the whole community generally, because the beneficial effects of the instruction given there would tend to the more economical working of mines, and also go a good way towards checking strikes, by introducing an educated class of agents amongst the colliers. On the ground of prevention of strikes alone, he thought that colliery proprietors would save ten times the amount that an institution ten times the size of the Bristol School of Mines would cost.

Mr. Lionel Brough and Mr. Handel Cossham also addressed the meeting, and the entire proceedings were of the most interesting character.

THE ATLANTIC TELEGRAPH A MEANS OF DEVELOPING MINERAL WEALTH.—At Trinity Bay (just brought into fame by being selected for the terminus of the Atlantic cable) minerals are plentiful, but not looked after, the people's attention being so entirely taken up with fishing. A valuable lead mine, yielding 86 per cent. of ore, has recently been worked by an American on some land ceded to the Newfoundland Telegraph Company by the colonial Government. It is about 10 miles from the Atlantic terminus, and, extraordinary to relate, the existence of the ore had been known for some time, but for want of capital and enterprise it remained entirely neglected until its value was appreciated by its present proprietor, who will in a few years realise a most handsome fortune from it.

GOLD EXTRACTION.—In the Valanzasca, in Piedmont, a large number of ores containing a small percentage of gold are raised and successfully treated by the natives; the process being, in the opinion of our correspondent, both more simple and effective than any in use elsewhere. The ores are first ground, and, after being mixed with lime, are allowed to remain for 24 hours. The compound is then submitted to the amalgamating process. A tub in the form of a truncated cone is provided, and in the bottom of this is a stone with a deep indentation, in the form of a basin. The ground compound is introduced into the said basin, wherein is a small quantity of mercury. A grinding pestle, somewhat smaller than the basin, is caused to rotate upon the ore under treatment, the tub being two-thirds filled with water. In this vessel the ore, &c., is agitated for 24 hours, by which time the amalgamation is perfect. The chief feature of the process is that none of the water is allowed to escape from the tub during the treatment, and that but 1 cwt. of stuff is treated at a time; there is thus no

loss of the precious metal, and comparatively poor ores are treated to a profit. From 50 to 100 of the tubs are used on one mine, and very little power is required to keep them in operation.

REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT]

SEPT. 2.—We have no change of any importance to notice in the Coal Trade this week.

At the meeting of the Institution of Mechanical Engineers, last week, a paper was read by Mr. N. Wood. "On the Improvements Effected in the Working of Coal Mines during the last Fifty Years." He refers in this paper particularly to the great northern coal field in the counties of Northumberland and Durham. He first explained the principal geological features of the coal strata, and the general geological and geographical appearance of the district. He referred to the four different descriptions of coal worked in this district, all of which are very valuable—steam coal, gas coal, house coal, and coking coal; of those the three former kinds are produced from different localities, but from the same bed, which is very remarkable, and the coking coal is produced from the lowest bed of the series. With reference to the opening of this coal field, he said that in 1808, 2,500,000 tons were sent away, and in 1856, 11,500,000 tons, exclusive of the coal used for iron furnaces and for home consumption. The extension, therefore, was almost five-fold within fifty years. The total quantity worked in 1856 was 16,000,000 tons, and was disposed of as follows:—Sent by sea 9,000,000 tons, and by railway 2,500,000 tons; the iron furnaces of Cleveland had used 2,300,000 tons; local consumption, 1,500,000 tons; colliery consumption, 200,000 tons: total, 16,000,000 tons, or one-fourth the whole produce of the coal worked in Great Britain. As to the mode of working the mines, it is by manual labour: many attempts have been made at various periods in the history of coal mining to adapt machines, worked by steam and other motive power, to cut the coal, but hitherto none have succeeded so far as to be brought into use. The latest machine of this kind was described by Mr. Wood, and he explained by means of diagrams its mode of application. It is is the invention of Messrs. Johnston and Dixon. It has been fully tried at the Broomhill Colliery, and is well reported of, but will only be suitable when the system of working is by long-wall. He next referred to the mode of lighting the mines. Fifty years ago this could only be done by means of candles and open oil-lamps, or, where gas existed, a rude contrivance, called a steel mill, was used. One of those was exhibited and worked. Explosions sometimes occurred from this mill. This led to the great invention of the safety-lamp. He explained the process by which Mr. Stephenson and himself constructed the first lamp, and also of the construction of the Davy and Clanny lamps. Three-fourths of the collieries in this district use Davy lamps, and the remainder use the Stephenson and Clanny lamps. He explained the modes of ventilation.—1. The air was carried round the edge of all the workings in one current only; this left the central parts unventilated, and great explosions occurred in consequence.* 2. The air was coursed—that is, carried up and down alternately, until the whole of the workings were ventilated, but still only one current.† 3. The mine was divided into different districts, and the air split, or divided, into separate currents, so that each district now receives a portion of fresh air, and the aggregate quantity of air is very much increased. The ventilating power in this district is generally the underground furnace, which he believed to be preferable to steam jets, fans, or pumping-machines. In the Hetton Colliery 300,000 cubic feet per minute is produced by two furnaces. This could not be done by any other known means. A pumping-machine was the next best mode; by it from 800,000 to 100,000 cubic feet of air had been produced. He explained the mode of ventilating the Lund Hill Colliery, and his opinion of the cause of that dreadful explosion. The system pursued in working the coal caused naked lights to be placed on three sides of the goaf. This goaf being hollow, or dome-shaped, where a magazine of gas was contained, which might be forced out at any time on the candles by falls of stone from above. And the whole system of working and ventilation was of the loosest kind. No division into districts, or separate air currents; the two essential points to observe in a colliery producing much explosive gas. So that the explosion cannot excite surprise, but rather we may be surprised that under such a system they escaped with impunity so long. He next explained the mode of pumping the water and drawing the coals, which is done by means of the steam-engine.

We must notice here that he made use of large diagrams, which showed in a very clear manner the different modes of working and ventilating the coal mines; and here he explained a diagram which showed his most improved manner of conveying the coals from the face of the workings to the bottom of the shaft. This diagram gives the best gradient for employing horse-power, which is 1 in 280, but the author recommended the employment of engine-power, and self-acting inclines in all cases; it also shows the lowest gradient capable of working a self-acting incline—that is, with pit-tubs, which is 1 in 28, and also the gradients capable of taking the rope down an engine plane with the empty tubs, &c. This is a very comprehensive and useful diagram, and the details respecting it, and underground conveyance of coals generally, may be found in Mr. Wood's elaborate paper on that subject in the *Transactions of the Northern Institute of Mining Engineers*. He next adverted to the mode of transit of coals to London, which is a very important matter. In 1856, 2,400,000 tons were taken by railways, and the charge was one halfpenny a mile per ton; this charge was much against the coal of this district, and in favour of that in the midland districts, because it enabled the latter to supersede the former in the London and other southern markets. But the introduction of screw-colliers has remedied this; many of those vessels are now employed. They can go into port, and in one tide go out again with 700 tons of coal; they frequently make a voyage in a week, and the average will be about 40 voyages per annum, while sailing vessels only made from 10 to 12 voyages per annum, and a very good profit can be made on 5s. per ton to London. The charge of the railway at one halfpenny per ton per mile, on 300 miles, is 12s., and the 5s. mentioned includes delivery in London; therefore the nett expense of sailing screws was 4s. 3d. or 4s. 6d. per ton. This is an extremely cheap rate, and has enabled the coalowners of this district to hold their ground against those of the midland districts. The competition was very serious one time The coalowners of the South took from those of the North the sale of about 1,200,000 or 1,300,000 tons a year in the London market. But now the North coalowners keep up the original quantity; the tables are, in fact, turned, and the North coalowners are gaining.

Mr. Fairbairn asked a question as to the probable duration of this coal-field, and Mr. Wood said, in reply, that it was variously stated as capable of supplying the present demand from 1700 to 3000 years; however, as they worked out one seam another would come into operation, and they had not yet, he thought, ascertained the whole number of beds of coal in the coal field. He also described the ironstone formations of the Cleveland, Weardale, and Cumberland districts. The quantity of coal consumed in 1856 by the ironstone furnaces of Cleveland was 2,300,000 tons. This ironstone yields from 25 to 30 per cent. of iron, and abounds in fossil remains. A small district, however, produces ore which yields 50 per cent.; this is magnetic iron ore.

We have now given the substance of Mr. Wood's paper, and would propose to draw some general deductions from its contents. We have seen, that in the great district referred to 16,000,000 tons of coal are raised annually, or one-fourth the whole annual produce of Great Britain. As this coal is all got by means of manual labour, a very large number of workmen, officers, &c., are employed underground; many of the mines from which this is extracted are very extensive, and produce much inflamable gas, yet for several years this enormous quantity of coal has been extracted with scarcely one explosion of this gas. Certainly no serious explosion has occurred for several years. Now, this may be considered by some a rather ticklish point to allude to. We, however, do so in no idle spirit, but for the purpose of drawing practical conclusions, which may possibly prove generally useful. The first reason which may be given for this phenomenon is, doubtless, that generally those collieries are well ventilated. This combined with a full and efficient staff of officers, and with a regular and systematic mode of management, has a very great tendency to general safety. The second reason which suggests itself is, however, the one we are inclined to lay most stress on—the almost universal use of safety lamps in all fiery mines, both in the whole mines and in the pillar workings, or in the long-wall workings where that is the system pursued. It is, we may remark, a very significant and important fact that since the principle has been fully recognised that it is necessary in all mines which produce explosive gas in abundance to use, for lighting such mines, locked safety lamps, we have escaped those awful occurrences, explosions of gas.

No doubt the last amendment of the Coal Mines Inspection Act has also materially tended to improvement. The promulgation and enforcement of the general and special rules throughout the district has been attended with the best effects; and although some cases have occurred where workmen have been summoned and punished for neglecting or infringing those rules, we do not recollect in this district a single case where the owners have been summoned for such neglect or infringement. We confess that we do not conceive that any system of ventilation has yet been invented which will give safety in all mines where open lights are used; of course, if we treat the question in an abstract manner, we can, with the knowledge we already possess, make any mine or portion of a mine safe for the use of such lights, when we can calculate with any degree of accuracy the quantity of gas given off. But when we take into consideration the great extent of such mines, and the ever-varying circumstances which occur of sudden rises and dips of strata, blowers of gas and other contingencies, we come to the inevitable conclusion that nothing but the liberal use of the safety lamp will ensure anything like safety.

With respect to the ventilating power employed, we do not agree with the author of the paper in giving general preference to the furnace; although the furnace possesses some advantages over every other power employed, it has also its disadvantages and dangers. And the machine of Mr. Struvé, we think, is capable of putting a sufficient quantity of air into a mine, and is freer from the objections which may be urged against the furnace. With respect to the general progress and successful working of the coal mines of the district, it is, no doubt, owing to the enterprise of the owners and to the introduction of improvements, some of the most important of which I perceive to be chronicled in the *Mining Journal*.

We have seen also that the coals of the district have successfully competed with those brought into the London and southern markets by the development of the railway system. This we attribute in part to the general good understanding which has existed between the owners and the workmen they employ, and the consequent absence of strikes. It is very important to notice that there has been no strike of a general character since 1844; so that we have had 14 years of uninterrupted industry and progress. It will be recollected that a great struggle took place at that time, and the yearly bonds were relinquished, which gave place to a regular monthly agreement, which it is clear, from experience, is very much preferable to the former system. We trust, therefore, that the present system will continue, and that the yearly bonds will not again become general, although they have been adopted again in some cases.

A paper by Mr. T. J. Taylor, "On the Progress of the Mechanical Means of Drainage and Raising Coals in the Newcastle Coal-Field," was to be read, but, unfortunately, Mr. Taylor was prevented by illness from attending, which is much to be regretted, as the paper is undoubtedly one of much importance. The subject is one of very great interest, we think, therefore, that it would have been advisable to have had it read, even in the absence of Mr. Taylor, as we should then have been put in possession of its contents. However, we think it possible that the paper may be produced and read before the Northern Institute of Mining Engineers; at any rate, it will be anxiously looked for.

* This may be taken as the primitive method of ventilating a coal mine.

† This may be taken as the first great improvement in ventilation.

THE MINING AND INDUSTRIAL INTERESTS OF CORNWALL.

[FROM OUR CORRESPONDENT IN WEST CORNWALL.]

SEPT. 2.—The copper standard last week again advanced, and as there was only 19*l.* 12s. per ton difference between the price of ore copper and cake copper, it cannot be expected that the standard will go much higher, unless the smelters intend to raise the price of copper. It does not appear from the reports that there is much demand for manufactured copper; still the trade, on the whole, is slowly improving, and better prices are looked for with confidence. The smelters have laid in considerable stocks at low standards, and, when trade revives, they will make large profits. Complaints are often made of the returning charges on copper ores being so high as 2*l.* 15s. per ton, when there is every reason to believe that upwards of 1*l.* less would be amply sufficient. But a change is not likely to take place in this matter until there is a great deal more competition in the copper smelting trade, or until the miners form an associated company to smelt for themselves.

The demand for tin seems to be improving, even more than for copper, and it might be expected the tin standard would go up. It is said that a new company is about to smelt at some works recently purchased near to Penzance. The tin smelting is now in very few hands, and there is reason to believe that they are in frequent communication with regard to prices. More competition, however, is growing up, and more is wanted.

The mining market shows signs of more activity, and there is reason to believe that the business will further increase after harvest. South Frances is doing well in stopes and pitches, and the shares are about 200*l.*; they would, no doubt, be higher if it were not for the unfortunate law suit between this mine and West Basset. West Seton shares are from 270*l.* to 280*l.* Dolcoath, at about 275*l.* Wheal Clifford is a rich mine at several points, but the expenses are heavy, and a debt of upwards of 3000*l.* has accumulated upon the adventurers. A productive mine, however, ought soon to pay off that amount of debt. In the eastern part of the mine the lode in the end of the 180 west is worth 80*l.* per fathom, and for the last 30 fathoms driving the lode has averaged from 9 to 10 tons per fathom. The extraordinary hot lode in the United Mines is very productive in Wheal Clifford; in the 208 fm. level it has been driven on 29 fathoms from the boundary, and the end is producing 10 tons per fathom. They are cross-cutting south from the 208, and expect to make a discovery, as hot water is issuing from that direction. This hot lode is one of the phenomena of mining, and well deserves a minute inspection by scientific men. West Basset is looking well at different points; in the 84 east the lode is worth about 50*l.* per fm. South Tolgus has a good lode in the 110 west, worth 24*l.* per fm., and there are productive stopes in the back of the 100; the price of shares has somewhat advanced. At Great South Tolgus, the lode in the 80 west is worth from 20*l.* to 30*l.* per fm. Great Wheal Busy is stated to have improved for tin. Cook's Kitchen is raising a large quantity of tin; the eastern levels are looking well, especially the 200, where the lode is worth 30*l.* per fm. in the end, and has been worth 50*l.*; the mine is amply provided with machinery, and the work done economically. Grambler continues to look well, and is much in favour. West Stray Park is opening up well in the western levels, especially in the 45, which is worth about 20*l.* per fathom. Camborne Vean continues to open good ore ground in the bottom of the mine. Cargall share are low. Rosewarne have lately advanced, in consequence of the mine looking better. Wheal Margaret made a dividend last week of 2*l.* 10s. per share; the previous dividend was of the same amount. The mine does not appear to be rich in the ends; still there is a considerable amount of ore ground available, and cross-cuts are being driven to develope other points. At East Pool meeting a dividend of 2*l.* 10s. per share was declared.

The granite of Cornwall is becoming an increasingly important branch of industry. The quarries near Liskeard, in East Cornwall, and near Penryn, in the West, supply large quantities for buildings in different parts of the kingdom, and, for some time past, immense blocks, of from 15 to 20 tons each, have been shipping for the construction of the new bridge at Westminster. The quality of the granite is good, and its use will probably be extended for the construction of public works of a substantial nature. There has been much excitement in the neighbouring districts of Porkellis United Mines, on account of the recent accident. Great numbers of people have visited the place, and the ground is so soft that some of it is said to be still falling in. There can scarcely be any hope of again working the mine.

The West Cornwall Railway Company held their half-yearly meeting last week, at Penzance. The ore traffic, in the last half-year, amounted to nearly 2000*l.*, and the coal traffic to 2564*l.* The profit on the half-year was only 4548*l.*, and no dividend was declared. The directors stated that the traffic was quite equal to that of the corresponding period of last year, which was satisfactory, considering that almost every railway had suffered a reduction in its receipts during the same period. It would appear from this result that the industry of Cornwall, and the circumstances of the people, had not been so much affected by the commercial panic and stagnation of trade as in other parts of the kingdom. The directors of the West Cornwall line look forward to the opening of the Cornwall Railway for an accession of traffic to their own line; and they express full confidence that all the works, permanent way, and stations of the Cornwall Company will be completed by the end of the year. The opening of this line will be a great boon for the county; and, it may be expected, will give an impetus to its industry in many ways. In the summer season Cornwall will be much more frequented by tourists than it has been hitherto, and the romantic scenery of its sea coasts will no doubt attract visitors from different parts of the kingdom. Mine adventurers will come down to visit their property, and see the captains for themselves, and many will bring their families with them, and enjoy the scenery, antiquities, and natural curiosities of the county.

THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

SEP. 2.—What has been repeated for the last three or four weeks must again constitute the report of the state of the Iron Trade—that there is but little actual increase of orders, but the tendency is towards improvement, which is most felt by the makers of superior iron, but which, in all cases, is so slight as scarcely to be perceptible. Prices are, however, generally firmer, and a general impression seems to prevail that the depression has reached its lowest point. The gradual improvement of trade throughout the country, and the success of our arms in India and China, are regarded as strong grounds for anticipating a gradual restoration of activity in trade. Pig-iron, ironstone, and coal continue at former low prices. The ironmasters of North Staffordshire are tolerably busy, having been far better off for orders during the crisis than those in this district, which is only to be accounted for by the facilities they possess for producing iron at low prices.

In the General Hardware Trades there is a slow but steady improvement, and the conviction is strengthening that there will be a tolerable autumn and a good spring trade. The earthenware trade in North Staffordshire is still dull, but it is improving, the manufacturers being able to give their men fuller employment than they could some time ago.

The strike of the thick coal colliers is not over, but there is every indication that the men will yield before long. It has now continued for nearly nine weeks. A "monster" meeting was announced to be held at Horsley Heath, Tipton, on Monday morning, that day being most favourable to the gathering of large numbers of men, as colliers and, to a large extent, the men engaged in the ironworks scarcely ever work on Monday, the latter at present not having anything to do in the early part of the week, except at a few works. The meeting was undoubtedly a failure. At its commencement there were not more than 200 present, nor were there many more at the close, whilst there were not more than 800 during any part of it, and nearly one-third of these were lads. There were also some females, but not in great numbers, although two of the speakers addressed the audience as "ladies and gentlemen." With two exceptions the speakers were the same as before, but their tone was more angry than at previous meetings. Jackson, who is undoubtedly the leading spirit in the strike, was congratulated by those around him on his increasing corpulency, and certainly the active man evinced no signs of suffering from want of food, of which, in fact, several of the speakers boasted. They made it a great point that the public sympathy was with them, and that they were supported by their contributions; but one of the speakers (Foy) used very different language to the rest: he had gone round with papers to sell, which he acknowledged was only a subterfuge for begging; but declared, with an Englishman's hatred for begging, that he would rather work all day cutting "brazil" (very hard coal) than go round on such an errand. Jackson used stronger language than hitherto: he boasted of three thin-mine pits being stopped, but acknowledged that it was necessary to meet at the pits in the morning to keep the men from going to work. He also said that if he went to work again where there were any "blacklegs," as those are called who are now at work, and saw the roof falling upon them, and his hand being stretched out would save them he would not make that small exertion. A man at the meeting expressed his concurrence in this fearful spirit. It can hardly be supposed that if the occasion were to arise these men would act upon such a revolting determination, the only justification for which is that a fellow-workmen differs with them as to its being wise to strike at this moment. Generally there was a good deal said in censure of those who were at work, and the whole tone of the meeting would lead to the conviction that the speakers were beginning to apprehend failure. Cafferey, evidently an Irishman by name and physiognomy, uttered some sad stuff about their being able to do better without capital than with it, and said they might, if united, get 1*l.* a day. He read a letter from Brierly Hill, a very illiterate production, merely signed "A Minear, Briley Hill," stating that if those on strike would come down to that locality and hold a meeting, the men on the western side of Rowley hills would join them in the strike. These colliers are, and have long been, working at the reduced rate, and it would be a great point if they could be gained over. Consequently this letter, although bearing no name, and without any other statement being made as to its source, was received with applause. When, however, the Chairman called for all from those localities present to hold up their hands, not one was shown. It was stated that there were two men from that part present, but as they were receiving relief from the box they would not hold up their hands. The other fresh speaker was a brickmaker, named Radford, a strong, robust, and very respectable looking man, whose speech was characterised by much good sense and excellent sentiment. This speaker was a teetotaller, and it is worthy of remark that nearly every one of the leading speakers was either a total abstainer or a member of some religious society, several being both. During the progress of the meeting colliers from the several districts in which the strike prevails were called upon to hold up their hands, and the result was that for Oldbury, a leading centre of the strike, only 11 hands were shown, which was accounted for by its being the wake there; for West Bromwich about 60 were held up; and for Tipton, the very part were the meeting was held, only about half as many. It had been given out that the thin miners about Wednesbury were on strike, but on a show of hands been called for for that district only four could be counted. The police were there in force to keep a sharp eye on the "outs," wherever they assembled. Several meetings have since been held, but only attended by a few, and their tone has been more angry, the police, who were previously treated respectfully, having come in for a good deal of ridicule and hostile remark.

In order to set right a false impression which may have arisen for the phrase "a day's work," it may be stated that an average thick coal collier does his portion of work in six hours; that they grumble if two days' or a day and a half's work is not set out for them; and that they often do two days' work in one day or night, which would make their earnings, at the present reduced rate, 8s. In the thin mines, where the wages are 2s. 9d. per day, the men at pits at which the enquiry has been made get 30s. weekly; and if they work day-work they are paid for a day and a half instead of a day, and they greatly object to this. The men getting ironstone about Tipton have 3s. per day, but their weekly earnings average 31s. to 35s., and they and those above named do not work Monday. The colliers in North Staffordshire generally work by day, getting 3s. 6d. for eight hours, far lower wages than are earned in this district. All appearances indicate that the strike is now hopeless; but as long as the public contribute to keep the men better, as they said at the meeting, than if they were at work, there will doubtless be some who will prefer play to work.

Some little uneasiness prevails among the colliers in North Staffordshire, and a few meetings have been held, but as yet there are no serious indications of a strike.

At the close of the meeting, on Monday, John Beddors was called up, and was received with applause, and listened to with considerable interest. He is a teetotaller, who having been reclaimed from a drunken career, has become a religious man, and devoted his leisure to the improvement of his mind. He is a very intelligent and respectable looking man. He writes poetry, and, with many defects, his lines exhibit very considerable natural ability. In the course of his remarks he paid a warm compliment to the Messrs. Bagnall, who had done so much for the improvement of their workmen. He also alluded to a gentleman whom he called "my noble friend, Reuben Farley," who had introduced him to a mutual improvement society, and he said when he went there he felt himself "one of the noblest men in the universe." He observed that he had met with more sympathy and encouragement from many of the masters than from his fellow-workmen in his efforts to improve himself, and to persuade his class to become more thoughtful and temperate. Some of the verses he recited are striking indications of the working of a superior mind, only very partially cultivated. The following verses appear worthy of a place in your columns:—

"It was on a gloomy morning, the day that I begun
To hurry skurry, moil and toil, by light not of the sun;
Far from the opening of day, and nature's lovely scene,
The mountain top, the cataract, the valley, and the green;
The lofty hill, the mossy bank, the tall aspiring trees;
The balmy air, the rich perfume, and the sweet summer's breeze;
Together with the charming woods, and yonder feathered tribe,
Stung with sorow, grief, and pain, almost to homicide.
Nor can you wonder when you know how early I was led
Through strata, many fathoms deep, to earn my daily bread;
Beneath the surface of the ground in water, mud, and mire,
Deluged thus, I have to wade through damp, foul air, and fire;
Cutting, carving, delving, driving, almost from my birth.
Can you sympathise or pity one so buried in the earth?

"Before the age of seven I ventured on the skip,
Downward went, and ever since have laboured in the pit;
Sometimes, too, am caught beneath a heavy fall of coal;
Then, grub-like, out I have to creep, through any little hole,
Or certainly I must have been long since deprived of life,
And left behind, to weep and moan, a tender loving wife.
Such is the danger under ground, and many, too, there be
That leave their home, descend the shaft, no more the top to see.
Not one or two, but many ways, I am exposed to death.
Yet worse than all I dread and fear the cold and chilly breath
Of Doggies, which are dogs indeed, and bully Buttles too,
Who curse and swear, blaspheme and tear, the whole twelve hours through.
With such like drilling, ever killing, to enhance their worth.
Can you sympathise or pity one so buried in the earth?"

The last five lines, doubtless, express what is often true as to the harsh treatment of those who overlook the colliers at their work. The whole question of the butty system must be reserved for a future letter.

The Birmingham and Wolverhampton Gas Companies have held their half-yearly meetings during the week, both declaring dividends at the rate of 10 per cent. per annum.

An energetic effort is being made to establish a short line between Birmingham and Sutton Coldfield, the park near which is a great place of resort for the inhabitants of the town, and it appears probable the object will be effected.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

SEPT. 2.—The Iron Trade of the past week has not presented any material change, the quotations remaining about the same as noticed in our last. The foreign orders have been rather more numerous, but the home demand has not made any material improvement. The demand for rails is somewhat more active, in consequence of the contracts now commenced for foreign railways.

The Coal Trade is dull, but there are indications of an improvement at an early date. The rates are not very firm, but the variation in price has not been general, but only as regards secondary qualities of coal. Mr. R. Barrow, of Staveley, is about to commence another pit for the purpose of working the hard coal at Staveley. The locality of the shaft has been de-

cided upon, and a line of railway is about to be made to communicate with the works. Satisfactory progress is being made with the Farewell Pit, and the engine is now in course of erection.

The Mill Town Mining Company, at Ashover, measured 82 loads of ore last Thursday. The mine is improving, and the ore is of very good quality. The Mill Dam Company are proceeding with their new shaft, and the opening out of the lowel level. The men have sunk 32 yards, and the ground is more favourable for further progress. The agent is of opinion that when the level is opened they will be in a position to raise sufficient ore to defray a large portion of the costs of sinking the new shaft.

A vein of lead, 3 ft. 6 in. wide, of nearly solid ore, has been cut at Wet Groves, a large dividend mine, situate near the Keld Head. At the Merryfield Mine, a water-wheel, 28 feet diameter and 2 feet 6 in. breast, has within the last few days been set to work, and which greatly economises labour. Here they are driving to a solid rib of metal, 14 in. wide.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

SEPT. 2.—The Iron Trade remains in the same state as for some time past, the demand being slight, and the works, consequently, in but partial operation. Orders from America have almost entirely ceased, while those from France and other parts of the Continent are by no means extensive or valuable. A Russian contract is still in hand at Treforest and Aberdare, and this affords the principal employment at present. For home consumption the enquiry is limited and irregular, and thus the state of affairs throughout the district generally is very unsatisfactory.

The Coal Trade is rather more brisk, and several good contracts have lately been offered and accepted for steam-coal. The business done, however, is inconsiderable compared with that transacted here before the strikes. The injury they inflicted is now felt acutely both by masters and men, and the latter heartily regret their obstinacy at the commencement of the year. Parties who formerly came to the ports of Cardiff or Newport for their supplies now deal in the North, and whether they will ever return is uncertain. Reduced in circumstances as the miners are, many of them earning scarcely 15s. a 16s. a week, they have only their own folly to condemn for the misery they suffer.

The local railway meetings which have been held this week place the falling off in trade in a strong light. The directors of the Rhymney line state that at present the coal traffic cannot be said to exist. The revenue, therefore, indicates to but a limited extent the resources of the undertaking. Several collieries have recently been connected with the line by sidings, and valuable results are expected when the trade improves. The Chairman of the line observed that the main cause of the depression of the trade had been the strike, which had told unfavourably in Glamorganshire, and that it was not until a few weeks ago that they got the better of it in the Rhymney Valley. The Rhymney Iron Company had derived great advantages from the opening of the line, as it conveyed their iron to Cardiff direct. They would also avail themselves of it for sending the large steam-coal to Cardiff, where, by reason of dock quarryage, where they had four coal tops, the railway company had every facility for shipping. Measures of a legal character would test the right of the Taff Vale Company to charge 1d. per ton for the siding at the junction, a charge independent of the toll then paid for running over 5¾ miles of that company's line.

Several alterations of importance to colliery owners are being made in the arrangements of the various railway companies. Thus, at the meeting of the Newport, Abergavenny, and Hereford Company, it was stated by Mr. Thomas Brown that the Ebbw Vale Company and others were about to make a connection with the line, and many coal and iron owners would then probably use it. Favourable results might also be looked for from the use of the Aberdare coal, which required to be conveyed to the companies who use it direct from the pit's mouth. If these ideas are carried out, a line over which a good deal of money has been spent may be turned from a losing into a remunerative speculation: but we are afraid the "golden day" is still at a distance.

Great efforts are being made on the hills to proceed with the projected railway between Merthyr and Abergavenny. At Brynmaur a meeting was held on Tuesday, and about 200 shares (20*l.* each) subscribed for. At the several iron-works—especially at Merthyr—the matter will shortly be energetically taken in hand. There are some steep gradients to overcome in making the line, but according to the engineers all difficulties may be easily overcome, and the road constructed at an expense of about 10,000*l.* per mile. The proposed length is 24 miles. Another long-talked of scheme—the extension of the Monmouth Railway to the Forest of Dean, is still incomplete, although there seems to be a fair chance of ultimate success. Mr. Crawshay Bailey states that the directors are determined to get to Coleford with as little delay as possible, and Mr. Thos. Brown, of Ebbw Vale, engages to take a large quantity of the mineral.

An inquest was held on Monday at Pontypool, before Mr. Ashwin, the coroner, on the body of George Coles, a miner, aged 45. From the evidence adduced it appeared that the deceased was working in the No. 1, Glyn Pit, belonging to the Pontypool Iron Company, when a portion of the roofing fell in and crushed him to death. The jury considered that the accident could not have been foreseen and provided against, and a common verdict was, therefore, returned.

A casualty of a similar description has happened at Aberdare to a collier named Thos. John. While at work in the Skerborwen Works a stone of immense weight fell upon him, and deprived him of life. The deceased is stated to have complained to his fellow-workmen the previous evening that he could not get on as usual, his mind being uneasy in consequence of the dangerous position of the very stone which so soon after proved fatal to him. The mass completely covered and flattened his body. At the inquest the usual verdict of "Accidental Death" was recorded.

We are sorry to observe in the *Gazette* the name of a very large—perhaps the largest—coalowner in the Forest of Dean—Mr. T. Nicholson. Rumours have reached us as to the affairs of the concern, but it would be premature to enter into them at present.

Mr. Rogers, in his important work on *Iron Metallurgy*, offers some very interesting suggestions in connection with the use of anthracite as steam coal. While dwelling much on the value of this mineral for use in furnaces, he deals with three great inconveniences which at present tend to lessen its utility. These are the accumulation of dust, the reduction of the coal to small pieces by the heat, and the consequent difficulty of getting the iron to a proper temperature. Mr. Rogers points out remedies for all these evils, and his proposals might be so readily carried into effect, that it is only surprising they are not generally adopted throughout South Wales. An efficient flux, and the gradual application of heat, upon a system fully explained in the work, seem all that is required to greatly increase the advantages of owners and consumers of steam coal. Full instructions are given for the preparation of a perfectly efficient flux, and it must be remembered that the advice comes from a man who has applied years of study to the subject. Proprietors of works might unquestionably materially add to their profits by a careful perusal of Mr. Rogers's chapters on the management of blast-furnaces alone; while the voluminous and laborious tables of analyses of Welsh and other coals would prove of the greatest possible service, and be worth more than the entire cost of the book.

On Monday, about eight o'clock, a volume of smoke was seen issuing from the air-shaft of the Evail Fach Coal pit. The mineral agent immediately descended, and ascertained that a vein of coal had caught fire, it is supposed from a spark emitted from the engine unserground. Steps were instantly taken for the safety of the men, and all of them were brought out in less than an hour. The water course was then turned into the pit, which will continue to run into it until the fire is extinguished. Although this pit will be stopped for a considerable time, we are informed that such delay will not interfere with the iron-works as was at first supposed. The proprietors of the Tondu Works have purchased the whole of the coke in stock at Cefncwsg, which, together with the coal that will be procured from the Rock Fawr level by working double shifts, will be sufficient to carry on the works until the Evail Fach Pit is put into working condition. The forge will be stopped for a short period, for effecting some necessary repairs to the boilers.

That most picturesque and somewhat neglected place (Dartmouth) was fourteen weeks ago supplied with gas at 8s. 6d. per thousand cubic feet—half manufactured by an old used-up private plant. General dissatisfaction created the Dartmouth Gas Coke and Coal Company (limited), capital 3500*l.*, with T. Atkins and Son, Chepstow, as their engineers and contractors, who, after arranging for independent works, completely razed the entire old manufacturing plant, which was purchased, with the site, for 1200*l.*, and a most efficient works was formed of five times the power of the old plant. The tank is brick and cement, close to the quay wall; the bottom 5 ft. below neap tides; the carbonising power capable of working off 5 tons of coal per 24 hours, with adequate condensing and purifying capacity, and gas storage equal to 20,000 cubic feet, with 6-in. outlet main into the town. The whole was completed for 1550*l.*, and the town first lit by the new works on Friday last. The company, contrary to the engineer's wish, believing it to be wise economy, insists on using the old leaky inadequate mains and services, with some slight extension. The directors give Messrs. Atkins the greatest credit for their excellent arrangement of the plant and designs, great energy in execution, and completeness of finish. Dartmouth is now in the ascendancy, and with the steam-boats plying on that finest of English rivers to and from Totnes—the steam tug and pleasure boat just added to the harbour—the shortly promised railway—picturesque, and other advantages—will vie in popularity with her powerful rival and neighbour, Torquay.

RAILWAY ECONOMY—THE OLD WORLD AND THE NEW.

Some ten months since we recorded the formation of the American Association for the Improvement of Railway Machinery, and noticed the deputation of a commission, consisting of Messrs. Holley and Zerah Colburn, to gather such information in Europe as could be advantageously employed in the United States. The result of the commissioners' enquiries into the comparative merits of the national systems of England and America is decidedly in favour of that of the former country, a circumstance which will be highly gratifying both to English engineers and to English capitalists, who have heard so much of the remunerative character of American railway undertakings.

The permanent way (or as the Americans term it, the road-bed and superstructure) and locomotives represent together about three-fourths of the total cash cost of the railways of America; and maintenance of way and fuel, repairs, and attendance on engines form one-half to five-eighths of the total operating expenses. In comparing American railways with those of Europe it is found that while the first cost of the permanent way of the latter is but little greater, their expenses per mile run for maintenance of way is but two-fifths that of America; whilst the consumption of fuel on European railways, for equal mileage, is less than 60 per cent. of the quantity burned in American locomotives. Their railways are operated at an annual expense of $120,000,000, whilst the cost of operating English railways of equal mileage is but $80,000,000—the difference alone being nearly equal to the annual production of the gold mines of California. The expense of maintenance of way of American lines is from $31,000,000 to $35,000,000 annually; that of English lines for the same milcage, $12,500,000—difference (say) about $20,000,000 annually. The cost of fuel for the former is $18,000,000 yearly; that of the latter for the same mileage is but $7,500,000, or $10,500,000 against the American system. The loads are 20 per cent. lighter on English railways (the percentage of fixed charges being thus greater); the speeds 25 per cent. higher; prices average 20 per cent. less for the usual items of materials used in repairs. The English lines do not have the great advantage commonly supposed in respect to easy grades. In alluding to fuel they (Messrs. Holley and Colburn) consider quantities only; but in respect to prices the difference is still more in favour of English railways.

Equating all these circumstances, there remains a large economy in the working of English lines, which can only be explained by referring to their engineering and physical condition. It is very common to attribute all examples of economy to management, implying thereby organisation, discipline, retrenchment, devotion, integrity, and business talent. These are of the greatest importance, but in none of these respects are English railways managed greatly different from those of America, excepting that the former have in nearly all cases a responsible engineering head permanently retained in the service. But in character and quality of structure English and American lines are materially different. As a science, engineering is indeed ably cultivated and creditable applied in Europe, but in America, although there is no lack of natural ability, no want of genius, in most of their works construction is everything, the future especially is sacrificed to the present; quantity not quality is the staple demand. Thus the higher developments of engineering are systematically undervalued, and they boast the extent of their executed works, and the enterprise with which they have been carried forward, while their quality, as disclosed in their frequent disastrous failures, to say nothing of their extravagant maintenance, is too often a reproach to their civilisation. Whilst it is an object of the most honourable ambition to utilise by simplified or more effective arrangements the greatest practicable capacity of the materials employed, nothing can be more unprofessional, nothing more desperate, than to trespass wantonly or ignorantly upon the known limits of strength, stability, or durability of those materials; and wherever engineers have thus degraded themselves and their profession by sacrificing their better judgment to the cupidity of ignorant proprietors they have fallen helplessly to the rank of mere tools for contractors and railway directors; and thus the latter have often obtained absolute sway in matters upon which only an educated engineer can properly decide.

For from three to ten years nearly all the leading American locomotive manufacturers have made every effort to introduce coal-burning engines. They have expended large sums in experiments, have generally assumed the entire risk of success of their plans, and in some instances have lost very large sums of money in consequence; but they have met with unjustifiable opposition, and hitherto comparatively little progress has been made. Europeans have always considered the Americans particularly willing to adopt improvements, but Messrs. Colburn and Holley prove the very reverse to be the case. The link motion was first made by W. T. James, of New York, in 1832. It was employed as a variable valve motion, and had ⅝ in. lap of each end of the valve. But one pair was built—that being for the Baltimore and Ohio Railway. The engine exploded its boiler in 1834, and this was the last link until 1843, when Howe, employed by R. Stephenson and Co., reinvented it, and embodied it in the engines built by that house. It was not, however, until 1855 that the improvement was introduced into America.

The great value of the report, of which the above is a summary, to Americans cannot be questioned, and we think the English also might gain much by acting upon some of the suggestions contained. The enquiries were undertaken and conducted on behalf of several American companies, and upon their publication this report has been entirely re-written, so as to form a *Treatise** as well as a report. To Messrs. Holley and Colburn the highest credit is due for the general accuracy of the ample details, and the excellent accompanying illustrations, of their valuable volume.

* "The Permanent Way and Coal-Burning Locomotive Boilers of European Railways; with a Comparison of the Working Economy of European and American Lines, and the Principles upon which Improvement must proceed." By Zerah Colburn and Alexander J. Holley. New York: The authors.

SAFETY-LAMPS—GLASS v. GAUZE.

In referring to the improvements effected in coal mines during the last fifty years, at the meeting of the Institution of Mechanical Engineers at Newcastle-on-Tyne, Mr. Nicholas Wood noticed the several methods which had been and were employed for lighting pits. He said that Sir H. Davy's lamp and that invented by Mr. Stephenson were, to his own knowledge, parallel inventions,—they were discoveries made simultaneously by those two great men. He objected to Dr. Clanny's lamp, because the glass at the bottom was uncovered. There could be no doubt that Clanny's lamp gave the best light, but he (Mr. Wood) considered that the unprotected glass was liable to breakage, and then there was danger. He had used several of Clanny's, but Davy's was the most popular—three-fourths of the safety-lamps used in England are Davy's lamps. From these remarks it would appear that the question is whether glass or wire-gauze is the stronger; for even Mr. N. Wood admits that the light from a Clanny is considerably greater than that from a Davy, the unprotected glass being the sole objection. Now, the opinion entertained by Mr. N. Wood as to the superior strength of the gauze is by no means universal; and as the force to which the side of the lamp has to submit is not of the most destructive kind, it is very questionable whether the difference in favour of gauze is so great as he supposes.

It may not be uninteresting to take this opportunity of referring to the progress which has been made by patentees during the past twenty or thirty years; the lamps in use previous to that time being almost entirely confined to those above enumerated. Although, doubtless, there have been some patentees whose improvements in the manufacture of lamps for various purposes might also be applied to safety-lamps, the first lamp patented, specially intended for miners, was that of Thomas Bonner, of Monkwearmouth Shore, Durham, who, on June 4, 1827, proposed certain means of increasing the light and extinguishing the flame, In this lamp there were several small wicks arranged around a centre tube; these wicks could be lighted separately, so as to increase or diminish the light. There were two covers, so arranged that the top could not be removed without extinguishing the flame. A second contrivance for extinguishing the flame consisted in an extinguisher on the top of the gauze chimney, suspended by a combustible substance, which, when burnt, permitted the extinguisher to fall upon the light. In Feb., 1849, Mr. H. H. Parish and B. Biram took out their patents; and in Oct., 1852, Messrs. Glover and Cail invented a modification of Mueseler's lamp, with two cylinders of glass round the flame, and the air to support combustion was conducted between the two glasses. There was a chimney in the gauze top to prevent the flame being blown or drawn through, and a contrivance which enabled the collier to raise and trim the wick as required. In the same month, Mr. T. W. Lord, of Leeds, patented a communication from a foreigner, in which it was proposed to form the wire gauze of several short and slightly conical pieces, one over the other, and forming a series of chambers. The wire gauze was connected with an extinguisher, so that the cover could not be removed without extinguishing the flame. A short glass tube was provided opposite the flame, so as to prevent the current of air blowing it against the gauze, and filling the latter with soot. The air was admitted below the flame, through wire gauze, so as to increase and improve the ordinary flame. An improved description of wick-holder and lifter was also used.

In Dec., 1852, Mr. T. Y. Hall, of Newcastle-on-Tyne, provisionally specified a combination of glass and gauze, the glass being protected by talc or wire-gauze. It would appear from the description that this lamp was a kind of Davy, in which part of the cylinder was glass. In Jan., 1853, George Fife, of Newcastle-on-Tyne, proposed a double gauze for chimney; a glass similar to Clanny's, protected by talc or mica; to supply the air from below, as in Stephenson's; and an elastic ring round the glass to allow for contraction and expansion. In the following month Reuben Plant patented the use of white wire instead of black; he made no other improvement, and when the gauze became soiled the difference of the wire could not be distinguished. Fras. and Wm. Whitehead, in July, 1854, patented a lamp with a solid frame and bull's-eye. Any attempt to unscrew the lamp released a detent, and extinguished the light. In the September following, Thos. Purdon proposed a solid frame, perforated chimney, the window pieces in slides, and talc within and without the glass; the talc and glass were united with copal varnish, which dried at the edges and remained liquid in the centre, so that if the glass were broken the varnish would fill up the cracks. In Aug., 1855, André Dubrulle patented an improved but very complicated lamp, in construction between the Davy and the Muescler. Since this time Dubrulle has so materially improved his lamp, that it is now amongst the best extant. Mr. Struvé has proposed a conical Davy; Mr. Mozard has patented a modification of Dubruelle's, and Mr. Munier followed his example; and several other ingenious inventors have introduced trifling modifications upon existing lamps, so that coalowners have every opportunity of selecting a thoroughly efficient lamp. The latest of these is the lamp of Mr. Alfred Sterry, which is an improvement upon the Davy, but probably one which would be open to the same objection as the Clanny, Mueseler, and other glass lamps. He makes the light-giving portion of the lamp entirely of wire-gauze, but in place of using a perfect cylinder he enlarges the bottom portion—that opposite the flame—into the form of a globe, the object being to obtain increased light, and to prevent the carbon from the wick soiling the gauze,

CAUTION TO COLLIERY PROPRIETORS.—At the Bradford Petty Sessions, on Aug. 26, Mr. Edward Ackroyd, of Gildersome, near Leeds, colliery owner, was charged by Mr. Charles Morton, Inspector of Coal Mines, with having neglected to establish special rules for the guidance of his workmen, as required by the Act 18 and 19 Vic. cap. 108. Mr. Skipworth, solicitor, of Wakefield, who appeared for the prosecution, stated that, in consequence of complaints made by the defendant's workmen, Mr. Charles Morton's attention was drawn to the Gildersome Colliery; and during the last three months he had repeatedly informed the defendant of the necessity for his establishing rules in accordance with the statute; but the defendant entirely disregarded these recommendations, and the Inspector had, therefore, no alternative but to institute legal proceedings against him. These facts being proved, Mr. Terry, solicitor, of Bradford, who appeared for the defence, stated that the defendant had had printed and circulated amongst his workmen copies of such rules as were adopted in some neighbouring collieries, and he erroneously thought this a sufficient compliance with the law. He had now, however, submitted the rules to the Secretary of State for his approval, in accordance with Mr. Morton's previous suggestions. The Bench said that the defendant's conduct was inexcusable after the frequent warnings he had received from the Inspector, and therefore they should inflict the highest penalty in their power—namely, 5*l.* and costs. The defendant was then charged with having neglected to properly fence his working pit, as required by general rule No. 3, and the offence having been proved, he was fined in the further penalty of 5*l.* and costs. A third charge was then preferred against the defendant for the breach of general rule No. 7. The water-gauge on the pumping-engine boiler was broken and useless; there was a common wheel float, which, like all instruments of that description, was apt to stick, and therefore could not be safely relied upon. The defendant having undertaken to procure forthwith an efficient water-gauge, the Bench, at the request of the Inspector, mitigated the penalty for this offence to 5*s.* and costs. The fines and expenses amounted to 11*l.* 10*s.*, which the defendant paid.

SERIOUS CHARGES AGAINST COLLIERY OWNERS.—Abraham, David, and J. Baxendall were summoned before the Bradford magistrates by Mr. Morton, for having neglected to establish special rules at their Holm Bank Colliery, near Bradford; and for similar neglect at their Cutler Heights Colliery, near Bradford; also for the violation of several general rules, and for carrying on their collieries without maps of the underground workings, as required by the Coal Mines Inspection Act. Mr. Terry, on behalf of the defendants, pleaded guilty, and said that his clients were ignorant of the law relating to these matters. Mr. Skipworth then stated that the defendants' workmen had complained to Mr. Morton, the Inspector, about the mismanagement of these collieries, and he read several letters written by the defendants in reply to Mr. Morton's friendly remonstrances and advice. The defendants had not only disregarded the Inspector's representations, but had attempted to deceive him in reference to the real condition of the pits. They had committed no less than ten infractions of the Act of Parliament; and yet in their letters to Mr. Morton they asserted that they had complied with its requirements, and denied the truth of their workmen's complaints on this subject. The Bench said that the defendants had clearly been guilty of gross negligence, and much credit was due to the Inspector for the forbearance and leniency he had manifested towards the defendants, and for the manner in which he had brought these cases before the Court. For the non-establishment of special rules they should fine the defendants 5*l.*; for the want of maps of the underground works two further penalties of 5*l.* each; for not fencing their air-pit, 2*l.*; for not fencing their working pit, 2*l.*; and for each of the other offences 1*l.*, besides costs; or, in default of payment, imprisonment in three cases two months each, and in each of the other cases one month. The penalties and expenses, amounting altogether to 29*l.* 14*s.* 6*d.*, were then paid.

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—WM. CLAY, Liverpool: Manufacturing cast-steel and wrought-iron into ingots and other forms.—F. H. STUBBS, Leeds: Communication between the guard and the engineman on locomotives or railway trains.—S. CAREY, Southwark: System of forming the permanent way of railroad transit, also common tramway, and channel or watercourse, by the means of cast-iron plates or boxes peculiarly constructed, so as to make one continuous way or channel.—G. P. LOCK, Liverpool: Composition of paints for coating iron ships, and for other useful purposes.—J. WEBSTER, Birmingham: Improved metallic alloy.—JAMES WALKER, Glasgow: Machinery or apparatus for moulding or shaping metals.—HENRY CLAYTON, Dorset-square: Machinery for manufacturing bricks and tiles, and other articles of brick, earth, clay, or other plastic material.—J. GEO. AFFOLD, Finsbury-square: Manufacture of wire ropes or cables.—R. JOBSON, Worksley: Apparatus for supplying water to axletree boxes and other journal bearings to lubricate the same.—C. L. LIGHT, Pall Mall East: Electric telegraph ropes or cables.—C. G. CUTCHET, Forest Hill: Railway danger signal whistle.—M. DELFOSSE, Regent-street: Electro-magnetic machines.—W. SMITH, Strand [for H. W. Gullet, Russia]: Steam-engines.—W. A. MUNN, Throwley House, near Feversham: Method of constructing railway carriages, whereby greater safety is insured in case of collision.—F. PRESTON and WM. MCGREGOR, Manchester: Machinery for cutting files.—H. HOOD, Leeds: Manufacture of Railway tyre-bars, boiler-plates, bar-iron, and forgings.—P. SPENCE, Pendleton: Manufacture of alum.—W. CLAY, Liverpool, E. L. BENZON, Sheffield: Manufacture of iron and steel.—F. PULS, Haverstock-hill: Distillation of coal.—H. B. BARLOW, Manchester [for David H. Zilgler, Winterthur, Switzerland]: Self-acting lubricators.—H. WILSON, Watling-st.: Mounting hand-saws.

STEAM-BOILERS.—Mr. Thos. Ivory, advocate, Edinburgh, proposes to generate steam by admitting only sufficient water into the steam-generating chamber at once to be introduced immediately into the engine. The steam generating vessel is separated from the body of water, and a continuous equal flow is secured by an arrangement of pistons and levers. The fire is made to act on the steam-generating vessel only, and the whole of the water is brought as nearly as possible into direct contact with the heating surface.

RAILWAY BREAKS.—Mr. J. H. Clément, Paris, has patented an improvement upon his falling shoe break, invented some two years since, which consists of making the reaction spring part of the great connecting rod, instead of pincing it on one side.

IMPROVED SPRINGS.—An improved combination of springs, which prevents the pressure or force of concussion from acting directly upon the elastic media, or springs, has been introduced by Mr. C. Rishworth, of Sheffield. The improvement consists in the use of a series of jointed rods, so arranged that when they are open they form a hexagon; within this hexigon a series of springs is placed and held in position by a rod supported in slots in two sides of the hexagonal bars.

MACHINERY FOR MAKING MOULDS.—In ramming the boxes for moulds, Mr. W. White, South Shields, proposes the use of standards carrying packing rams actuated by a suitable arrangement of levers and cranks. The mould boxes are placed on movable tables, which pass beneath the rams.

NEWEY'S FASTENINGS.—Mr. Henry, patent agent, Fleet-street, has just filed a specification for Mr. Newey, of Birmingham, the chief feature of which is an ingenious form of loop, or bar with needle holes, intended as a substitute for the ordinary eye (in hooks and eyes), and so contrived as to hold the hook more firmly and closely; the loop may also be used in manufacturing dress ornaments. The patent includes other forms of connections or clasps.

ARTIFICIAL LEATHER.—Mr. Newton coats a textile fabric with a compound of linseed oil and burnt umber in a powdered state as a substitute for leather. Mr. W. Kemble Hall, Cannon-street, proposes the application of blue grease and *terra japanica* to undressed moleskin for the same purpose.

PURIFYING GAS.—Mr. M. W. Rain, Bucklesbury, proposes the use of a vessel containing chambers through which the gas is made to pass, and in so doing is brought into contact with a large surface of mineral naphtha. This liquid absorbs the impurities in the gas, and throws off a vapour which mixes with the gas, and adds much to its illuminating power.

PERMANENT WAY.—Mr. S. A. Beers, New York, proposes the construction of railways with an iron foundation rail in the shape of a series of upright arches. Strips of gutta percha, lead, wood, &c., are to be used to overcome the too great solidity which would result in a track entirely of iron, with stone foundation.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The NEXT MEETING will be HELD at LEEDS, commencing on Wednesday, September 22, 1858, under the presidency of RICHARD OWEN, M.D., D.C.L., V.P.R.S. The reception room will be in the Town Hall.

Notices of communications intended to be read to the association, accompanied by a statement whether or not the author will be present at the meeting, may be addressed to JOHN PHILLIPS, M.A., LL.D., F.R.S., assistant general secretary, Magdalen Bridge, Oxford; or to the Rev. THOMAS HINCKS, THOMAS WILSON, Esq., and W. SYKES WARD, Esq., local secretaries, Leeds. JOHN TAYLOR, F.R.S., General Treasurer.

6, Queen-street-place, Upper Thames-street, London.

COPIAPO AND CALDERA RAILWAY.—Notice is hereby given, that the next QUARTERLY DIVIDEND of 4 per cent. will be PAYABLE on the shares of the above company to the holders of shares registered in England, at the banking house of Messrs. Williams, Deacon, and Co., on and after 19th October next.

By order, EDWARD J. COLE.

Office of Registry and Transfer, 2, New Broad-street, August 17, 1858.

COPIAPO EXTENSION RAILWAY COMPANY.—Notice is hereby given, that the directors have made a CALL of ONE POUND PER SHARE, making, with instalments already paid, the sum of £6 per share, payable at the banking house of Messrs. Williams, Deacon, and Co., on or before the 15th day of September next.

The scrip certificates, together with the bankers' receipt, must be left at the offices of the company, No. 2, New Broad-street, to have the call inscribed thereon.

The interest for the six months, ending 31st July last, will be paid at the same time.

By order of the Directors, EDWARD J. COLE, Sec.

London, August 17, 1858.

TINCROFT MINING COMPANY.—Notice is hereby given, that a DIVIDEND of FIVE SHILLINGS PER SHARE (being the twenty-second) has this day been declared on the shares in this company, payable forthwith.

Dated September 2, 1858. By order of the Board, HIRAM WILLIAMS, Sec.

N.B.—Certificates must be left at the office of the company, 61, Moorgate-street, London, ten clear days, in order to be examined and marked.

THE BRAZILIAN LAND AND MINING COMPANY (LIMITED).—Notice is hereby given that, pursuant to the provisions of the Articles of Association, the FIRST ORDINARY GENERAL MEETING of the shareholders in the above company will be HELD, at the offices of the company, No. 26, Throgmorton-street, in the City of London, on Monday, the 13th day of September inst., at One o'clock precisely.

Mr. Sheppard and Mr. Corney, two of the directors, will retire by rotation, and, being eligible, offer themselves for re-election. Mr. George Ericsen Ball and Mr. Charles Ritchie, the auditors, will also retire, and Mr. Ball will offer himself for re-election.

The transfer books of the company will be closed from this day until the 20th inst.

By order of the Board, J. PENNYCOOK BROWN, Sec.

26, Throgmorton-street, Sept. 1, 1858.

SOUTH AUSTRALIA.—ROYAL MINING COMPANY.—Notice is hereby given, that the directors of the Royal Mining Company of South Australia have this day made a CALL of ONE SHILLING PER SHARE on all shares in this company. That such call is made payable at the office of the company, King William-street, Adelaide, on every Tuesday and Thursday, from the 1st July to the 31st December, 1858, between the hours of Eleven and One o'clock. All scrip requiring to be transferred must be left for one week at the office of the company.

Notice is hereby further given, that all shares not paid up by the 6th January, 1859, will be absolutely forfeited. By order of the Board of Directors,

May 18, 1858. NATHANIEL SUMMERS, Sec.

LEAD MINES.—LEAD ORES are PURCHASED by the BRITISH AND FOREIGN SMELTING COMPANY (LIMITED) in small or large parcels, and for which liberal prices will be given. Samples direct from the mines are preferred, and may be addressed to the company's works, at Old Ford Wharf, Bow, near London; or to the offices, No. 26, Throgmorton-street, London.

N.B.—LEAD ASHES and every description of OLD LEAD PURCHASED.

LEAD FOR EXPORTATION.—PIG-LEAD (hard and soft) SOLD at LOW RATES. The BEST PRICE given for LEAD ASHES, &c., and OLD LEAD.—ROUTELL and Co., Southwark Lead Works, Gravel-lane, London.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL. | OXIDE OF COBALT. [WIRE, &c
REFINED METALLIC BISMUTH. | GERMAN SILVER—IN INGOTS, SHEET
NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS,

NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.

JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.

Reference.—Professor Miller, King's College, London.

GOVERNMENT SCHOOL OF MINES, AND OF SCIENCE APPLIED TO THE ARTS.

DIRECTOR—Sir RODERICK IMPEY MURCHISON, D.C.L., M.A., F.R.S., &c.

During the Session 1858-59, which will COMMENCE on the 4th October, the following COURSES of LECTURES and PRACTICAL DEMONSTRATIONS will be given:—

1. CHEMISTRY ..... By A. W. HOFMANN, LL.D., F.R.S., &c.
2. METALLURGY ..... By JOHN PERCY, M.D., F.R.S.
3. NATURAL HISTORY..... By T. H. HUXLEY, F.R.S.
4. MINERALOGY ..... } By WARINGTON W. SMYTH, M.A., F.R.S.
5. MINING ..... }
6. GEOLOGY ..... By A. C. RAMSAY, F.R.S.
7. APPLIED MECHANICS .. By ROBERT WILLIS, M.A., F.R.S.
8. PHYSICS..... By G. G. STOKES, M.A., F.R.S.

INSTRUCTION IN MECHANICAL DRAWING, by Mr. BINNS.

The fee for Matriculated Students (exclusive of the laboratories) is £30, in one sum, on entrance, or two annual payments of £20.

Pupils are received in the Royal College of Chemistry (the laboratory of the school), under the direction of Dr. Hofmann, at a fee of £10 for the term of three months. The same fee is charged in the Metallurgical Laboratory, under the direction of Dr. Percy. Tickets to separate courses of lectures are issued at £1, £1 10s., and £2 each. Officers in the Queen's or the East India Company's service, Her Majesty's Consuls, acting mining agents and managers, may obtain tickets at reduced charges.

Certificated schoolmasters, pupil teachers, and others engaged in education, are also admitted to the lectures at reduced fees.

His Royal Highness the Prince of Wales has granted Two Exhibitions, and others have also been established.

For a prospectus and information, apply at the Museum of Practical Geology, Jermyn-street, London. TRENHAM REEKS, Registrar.

ROYAL CORNWALL POLYTECHNIC SOCIETY.—

The TWENTY-SIXTH ANNUAL EXHIBITION of the above society will take place on Wednesday, Sept. 29th, and following days, when PRIZES will be AWARDED in the following departments:—MECHANICAL INVENTIONS, NAVAL ARCHITECTURE, FINE ARTS, NATURAL HISTORY, STATISTICS, PLAIN AND FANCY WORK, and SCHOOL PRODUCTIONS.

Objects intended for exhibition or competition must be sent, carriage paid, to the Polytechnic Hall, Falmouth, between the 20th and 25th of September, inclusive.

N.B.—By a recent arrangement of the committee, patented or registered articles are no longer excluded from prizes in medals.

For further particulars, application may be made to Mr. SYDNEY HODGES, Falmouth.

ALVENNY MINING COMPANY (LIMITED).

Capital £17,000, in 17,000 shares of £1 each.

To be fully paid upon allotment.

SECRETARY—Mr. J. D. Brunton.

OFFICES,—40, KING WILLIAM-STREET, E.C.

This company is formed to work three contiguous mining setts, known as Alvenny, Fox Tor, and Red Hill. The Alvenny sett is known to be of great value, having produced £30,000 worth of tin at and above the adit level. It is well known that rich leaders of tin have gone down below the adit, but as the mine has been worked hitherto without machinery, these leaders could not be followed in consequence of the water. The ground is easy and inexpensive, and a steam-engine of 40-in. cylinder would sink the mine to a depth of 150 fms. The lode averages 3½ ft. in width, and an adit has been driven upon it for about 250 fms. Numerous adit shafts have been sunk, any of which may be made available for more extended workings.

In the Fox Tor sett, four shafts have been sunk 10 fms. each, and one 16 fms. About 300 fms. have been driven at adit and in the 10 fm. level, and these drivings have produced about £2000 worth of tin. Excellent ground has thus been laid open, which will let at from 5s. to 6s. in 17. tribute as soon as the water is pumped out. There are four or five tin lodes in the sett, but only one has yet been wrought. This sett can be very economically worked, there being sufficient water-power for stamping and crushing.

The Red Hill sett is situate at the eastern extremity of the Alvenny and Fox Tor boundaries. All the lodes which pass through these two run directly through the Red Hill sett, and ensure valuable working for many years to come.

The principal part of the dead work is already done, and the mines are laid open so as to ensure immediate returns.

The lease is granted for the unusually long period of 40 years, at a royalty of 1-15th, with a dead rent of £50 per annum. And for this, and the £15,000 value of work already done, together with the buildings and plant upon the mines, an agreement has been entered into with the lessees to assign the lease to the company for the consideration of £7000 to be paid to them, with £6000 of which they undertake to subscribe for and pay upon 6000 shares. Of the remaining 11,000 shares it is proposed to issue only 6000 at present, as it is anticipated that their value will be greatly increased by the success of the mines, before the proceeds of the remaining 5000 will be required; and when they are issued the then existing shareholders will have the option of taking them *pro rata*, at par. Operations will be commenced as soon as 3000 shares are subscribed for.

Full prospectuses, with reports and forms of application, can be obtained of the secretary, at the offices of the company.

GUTTA PERCHA BANDS, TUBING, &c.—

Our BANDS, carefully MANUFACTURED from the VERY BEST GUTTA PERCHA only, are considerably CHEAPER, and, when fairly worked, are far more DURABLE than LEATHER. Can be had in lengths of 100 or 120 feet without a joint, are easily joined or repaired, and are, when worn out, re-purchased by us at about one-third of their original cost. In the event of a break down, a band of any size can be supplied within a few hours of receipt of order. The present prices are as under:—

Bands ⅛ in. thick and upwards to ½ in. .. 2s. 0d. per lb.
Bands above ½ in. thick..... 2s. 2d. per lb.

Subject to a liberal discount for cash, varying according to quantity. TUBING and other articles equally low. All our patented manufactures are to be obtained wholesale from our own works; retail from any of our dealers.

THE WEST HAM GUTTA PERCHA COMPANY.

West-street, Smithfield, London, E.C.

NEW PATENT ACT, 1852.—Mr. CAMPIN,

having advocated Patent Law Reform before the Government and Legislature, and in the pages of the *Mining Journal*, &c., is now READY to ADVISE and ASSIST INVENTORS in OBTAINING PATENTS, &c., under the NEW ACT.

The Circular of Information, gratis, on application to the Patent Office and Designs' Registry, 156, Strand.

Now ready, price 25s., cloth.

THE MERCANTILE AND MARITIME GUIDE, by G. T. WILMORE, A.M.,

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London and Glasgow: RICHARD GRIFFIN and Co.

Now ready, price 2s. 6d. each part.

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The PROCEEDINGS of this INSTITUTION are PUBLISHED in QUARTERLY PARTS, which contain the Papers read before the Members, unabridged, and accompanied by the necessary explanatory plates, together with full abstracts of the discussion upon them.

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London: Published at the *Mining Journal* office, 26, Fleet-street.

INVESTMENTS IN BRITISH MINES.

Full particulars of the most important Dividend and Progressive Mines will be found in the Fourth Edition of

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Recently published, by J. H. MURCHISON, F.G.S., F.S.S.

Pp. 356; price 3s. 6d., by post, 4s.

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Is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner.*

This is really a practical work for the capitalist.—*Stockport Advertiser.*

MINING MATERIALS AND MACHINERY FOR SALE.

MR. JOHN PERMEWAN WILL SELL, BY AUCTION, on

Friday, the 10th day of September next, at Twelve o'clock, at East Balliswidden Mine, in the parish of Sancreed, about two miles and a half from Penzance, the following very excellent MACHINERY and MATERIALS, viz.—

A WATER-WHEEL, 38 ft. diameter and 4 ft. breast, cast-iron axle with crank for 6 or 8 ft. stroke; a stamps axle, 12 heads, frames, lifters, &c., complete; a winding machine, with driving wheels, &c.

3 pumps, 12 in.
70 fms. ditto, 4, 5, and 6 in.
1 5 in. bottom, with pole, &c.
1 11 in. working, doorpiece, &c.
A large balance-bob.
2 angle ditto.
30 fms. 6 in. wood rods.
40 fms. 5 in. ditto.
Rod and flange bolts, &c.
100 fms. ladders.
15 pair strapping plates.
2 horse-whims, with shieves, &c.
5 8 in. whim chain.
Iron tram wagon.
Wood ditto.
110 fms. railroad.
Smiths' bellows, 36 in.
Ditto anvil.
Ditto tools.
Miners' tools and chests.

Stamps floors, frames, buddles, kieves, sheds, &c., wheelbarrows, launders, a quantity of new and old timber, in balk, plank, &c.; lot of roofing, new and old iron, sampling iron and barrow, screw stock, counting-house furniture, &c. The whole will be found in good condition.—Dated August 26, 1858.

ALTERATION OF DAY OF SALE,
FROM THURSDAY, the 9th, TO FRIDAY, the 10th September, 1858.

GLAMORGANSHIRE.

TO COLLIERY PROPRIETORS AND COAL SHIPPERS.

IMPORTANT SALE of very valuable LEASEHOLD COLLIERIES and FARMS, situate in the RHONDDA VALLEY, in the county of GLAMORGAN, within a few yards of, and in connection with, the Rhondda-fawr branch of the Taff Vale Railway.

MR. T. WATKINS is instructed to SELL, BY AUCTION (unless

previously disposed of, of which due notice will be given), at the Cardiff Arms Hotel, in the town of Cardiff, on Friday, the 10th day of September, 1858, at Three o'clock in the afternoon for Four o'clock precisely, subject to such conditions of sale as shall be then and there produced.

All that valuable WORKING COLLIERY, with all the PLANT and MACHINERY and BUILDINGS thereon (except the cottages and gardens on building ground sublet), together with the several farms held conjointly therewith, known as the DUNRAVEN COLLIERY, situated in the Rhondda Valley aforesaid, in the parish of Ystradyfodwg, in the county of Glamorgan, adjoining to and in connection with the Rhondda branch of the Taff Vale Railway, held under leases for the unexpired terms of 58 and 59 years respectively, on highly advantageous terms, and at unusually favourable royalties, way leaves, and dead rents, comprising the whole of the MINERALS under the Hendrewen, Tydraw, Hendregellin, and portions of Blaenrhondda and Ystradffernol Farms, in the said parish of Ystradyfodwg, containing an area of 995 acres, and including the surface of all the before-mentioned farms, excepting Blaenrhondda and Ystradyffernal, having a surface area of 730 acres.

The property contains all the well-known and celebrated MINERAL MEASURES of the district, with IRONSTONE, BLACKBAND, and valuable STONE QUARRIES, including the celebrated ABERDARE STEAM COAL. The ABERGORCHY SEAM of STEAM COAL is now being worked by two levels, adjoining to and in connection with the Rhondda branch of the Taff Vale Railway; the present output exceeds 150 tons per day, which may at a very moderate outlay be increased to 300 tons per day.

The colliery has a direct communication by the Taff Vale Railway with the flourishing port of Cardiff, and with the Ely Docks and Harbour, from both of which it is distant 24¾ miles. It has also a direct communication with the important districts of Staffordshire and Shropshire, by the loop line of the Newport, Abergavenny, and Hereford Railway.

The colliery horses, sheep, farming stock, and implements may be taken at a valuation, at the option of the purchaser.

Further particulars may be had of the auctioneer, Cardiff; or of Mr. H. J. HOLLIER, solicitor, Aberdare.

IMPORTANT SALE AT THE PENYRHENBLAS MINE, NEAR HOLYWELL, FLINTSHIRE.

MR. JAMES WILLIAMS has the pleasure to announce that he is

favoured with the instructions of the proprietors to DISPOSE OF, BY PUBLIC AUCTION, on the said premises, on Tuesday, the 14th of September, 1858, commencing at Eleven for Twelve o'clock precisely, the whole of their valuable PLANT and MATERIALS, POWERFUL STEAM-ENGINE AND APPENDAGES, TOOLS, IMPLEMENTS, and an extensive variety of miscellaneous articles of use, comprising—

An excellent 45 in. cylinder CONDENSING STEAM ENGINE, 7 ft. stroke of piston, with two cylindrical boilers, each 33 ft. long by 5 in. diameter, replete with steam case, regulating valves and connecting pipes, &c.

Powerful 8 arm capstan, shears and rope; balance bob, with 24 yards connecting rods in shaft; 39 pieces of 11 in. pumps, each 9 ft. long; 13 of 12 in. ditto ditto, and one ditto of 4½ ft. long; plunger pole and case, 11 in.; H piece and windbore complete, one doorpiece, 11 in. barrel and windbore; about 110 yards of main rods, 10½ in. square, with plate and pins complete; about 45 yards of pump rods, with ditto for drawing lift ditto; cistern for plunger lift, strong staples for plunger pole, drawing lift and set off complete; set of plates for T bob, with carriage complete; three buckets for 11 in. barrel, clack seats and shells, pump rings and pins, pair of capstan pulleys, pair of strong yokes, door clack pieces, working barrels and windbores of various dimensions, match pieces and pumps; about 400 yards of 2½ and 2 in. wrought-iron rails, and chairs for ditto; about 300 yards of flat-rods; scrap, cast, and wrought-iron; pulleys of various sizes, cast-iron wheels for wagons, three winches, eight new iron wagons and kibbles, whimseys complete, sets of chain for ditto and heavy work, air machine, new and second-hand wheel-barrows, carpenters' bench and tools, smithy tools and implements, jack block, stretching screw, large bell, a quantity of wooden railing, useful boards and timber, sundry office furniture, &c.

Also, the COMPANY'S INTEREST IN THE MINING GROUND (embracing about 170 acres), held under a lease granted by the Marquis of Westminster, at a moderate royalty, for an unexpired term of ten years.

Descriptive catalogues of the whole will be published, and may be had five days prior to the sale, with any further information, by applying to Mr. THOMAS HUNT, at the mine; or to the auctioneer, at his office, Maes-y-dre, Holywell.

HIGHLY IMPORTANT AND EXTENSIVE SALE AT THE HENDRE MINES, NEAR MOLD, FLINTSHIRE.

TO LEAD MINE AND COLLIERY OWNERS, ENGINEERS, AND MACHINISTS, IRONFOUNDERS, MILLWRIGHTS, BROKERS, AND OTHERS.

MR. JAMES WILLIAMS has much pleasure in announcing that he

is favoured with the instructions of the former lessees of these mines to SUBMIT TO SALE, BY PUBLIC AUCTION, on the said premises, on Monday, the 20th Sept., 1858, and following days, until the whole is disposed of, all their very valuable powerful CONDENSING, PUMPING, and WINDING ENGINES, WINDING APPARATUS, CRUSHING MILL, WATER-WHEELS, PLANT, and MACHINERY, WEIGHING MACHINE, 12½ in. LATHE, TOOLS, IMPLEMENTS, UTENSILS, and a great variety of other useful miscellaneous effects, consisting of, chiefly—

ONE SINGLE POWER 80 in. PUMPING ENGINE, with beam of equal length, 10 ft. stroke of piston, fixed upon a strong cast-iron foundation; four cylindrical boilers with tubes, each 38 ft. long by 5½ diameter, and connections; 24 in. plunger pole and case, stuffing-box and gland, clack doorpiece, H piece, windbore, and 70 yards of 24 in. pumps.

ONE 20 in. cylinder PUMPING AND WINDING CONDENSING ENGINE, 4 ft. stroke, double power and connections complete, with two cylindrical boilers, one 33 ft. long by 6½ diameter, and the other 30 ft. long by 5 in diameter, with windbore, H piece, and clack doorpiece.

ONE DOUBLE POWER 16 in. cylinder PORTABLE CONDENSING STEAM-ENGINE, working on 2 ft. stroke, the cylinder fitted with slide valve and eccentric gear; beam with parallel motion, connecting rod, &c., and two cylindrical boilers, one 37 ft. long by 3¾ in diameter, and the other 16½ ft. long by 3½, with steam pipes, pumping gear, &c.

CRUSHING MILL, with three rollers, fly-wheel, &c.

TWO WINDING APPARATUS, with reversing motion, quills, chains, &c.

CAST-IRON WATER-WHEEL, 12 ft. diameter, 3 ft. breast, wrought-iron shaft, brass pedestals, crank, &c.

ONE WOODEN WATER-WHEEL, 9 ft. diameter, 3 ft. breast, with iron break, &c.

Shear legs, capstans, pulleys and ropes, balance-bobs, counter boxes, pit-head work, &c.; two 18 in. plunger poles and cases, 12 ft. long, with stuffing-box and gland, H piece and windbore, one windbore for sinking, clack piece and door, and 17 in. working barrel, 11 ft. long; other windbores, clack doors, and H pieces for various sized plungers, &c.; a large quantity of 19 in. pumps, matching pieces for ditto, and other sized pumps; 17 and 18 in. working barrels, 12 ft. long, with clack doorpieces and windbores for each; plunger pole for 9 in. lift, 11 ft. long; H piece for ditto, with door, stuffing-box and gland; windbore case, gland, and spindle for 12 in. lift; flanche and socket pipes of various diameters; a large quantity of wrought-iron plates for main rods, joints, clasps, &c.; two wrought-iron boiler tubes, 21 ft. long by 2 ft. 3 in. diameter; strong wrought-iron yokes of different sizes, a large quantity of flat and round wrought-iron rods, ditto capstan and other ropes; brass valves, seats, and glands; scrap copper, brass, and lead; ditto wrought and cast-iron, old files, gutta percha for gearing, &c.; large wrought-iron steel-yard for weighing pumps, &c.; weighing machine up to 8 tons; capital 12½ in. turning lathe, useful wooden patterns, large bell and framing, ditto cast-iron maundrill, 9 and 24 in. diameter; gauges, tongs, maundrils, &c.; an immense quantity of wrought-iron rails, Lowmoor and Bowling (or engine) bars, hammered iron and common bars, staples, glands, and nuts, wrought-iron lids for buckets, joints for lifts, and a host of other articles of general utility in concerns of this description, which, with the above, will be fully described in catalogues, to be had eight days prior to the sale, of Mr. ROBERTS and Mr. JOHN PRICHARD, at the mines; at the Black Lion Hotel and Royal Oak Inn, Mold; of Mr. C. D. WILLIAMSON, Greenfield, Holywell; or of the auctioneer, at his office, Maes-y-dre, Holywell.

*** The Hendre Mines are distant from Mold about three miles, and Holywell eight, both first-class stations on the Chester and Holyhead Railway. The premises also adjoin the Mold and Denbigh turnpike-road.

COPPER AND NICKEL MINES.—The HOLDERS of a

METALLIC MINERAL CONCESSION in SWITZERLAND are WILLING to TRANSFER their RIGHTS and PRIVILEGES upon TERMS HIGHLY ADVANTAGEOUS to the PURCHASER. This concession contains several deposits of copper, but is more especially valuable for its numerous rich nickel lodes, which can be traced for a great distance. Parties desirous of acquiring the right to raise the ores for a fixed term of years would also be treated with. Address, for further particulars, prepaid and in French, to Mr. POULET, Ingenieur Civil des Mines, Rue Vinertex Isle 23, à Liege, who is entrusted with the sale of some valuable sulphur (iron pyrites) mines.

TO BE SOLD, BY PRIVATE TREATY, THE UNEXPIRED

TERM of LEASE of certain extensive and valuable LEAD MINES, situated between the town of Newtownards and Bangor, in the county of Down, Ireland, and called the NEWTOWNARDS MINES; together with the MACHINERY, TOOLS, IMPLEMENTS, STORES, and MATERIALS, thereto belonging; including FIVE STEAM-ENGINES, EXCELLENT CRUSHING MILLS, and every requisite convenience for carrying on an extensive business. These mines have already yielded in profits £85,000 and upwards, and are still working at a profit. It is now requisite to open out new ground, of which there is a large extent unexplored; from the nature of the Deed of Association, the directors are unable to make calls upon the shareholders, and it has been determined to dispose of the mine.

The LEASE, which comprises the whole townland of White Spots, is held for the life of a healthy young man, 19 years of age, together with an unexpired term of six years from the 1st November last. The works are conveniently situated within a few miles from the port of Bangor, where the mining company have a store.

A few spirited adventurers, willing to embark a moderate capital, will find this a most favourable opportunity, offering fair and reasonable prospects of success.

Terms and particulars may be known upon application to W. BECKWITH, Esq., Douglas, Isle of Man; or Mr. H. B. NOBLE, Secretary of the Newtownards Mining Company, Douglas.—April 7, 1858.

VALUABLE MINING SETT AND MACHINERY IN

DEVONSHIRE.—SETT consisting of TWELVE HUNDRED ACRES, capable of making two good mines, having a powerful STEAM-ENGINE and PUMPS, completed to a shaft 50 fms. deep, with all other requisite BUILDINGS and MACHINERY. Large quantities of silver-lead ore have been raised, and most satisfactory reasons will be given by the mortgagee for its disposal.—For further particulars, apply to "A. Z.," 49, Mornington-road, London, N.W.

P.S.—This is a *bona fide* concern, and well worthy the attention of mining men.

Combmartin, North Devon, August 31, 1858.

COAL FIELD.—The WHOLE, or PART, of a highly valuable

COAL FIELD to be DISPOSED OF, subject to royalty only, being one of the best and most extensive in the Forest of Dean.—For particulars, apply to Mr. Wood, 19, Goulden-terrace, Barnsbury-road, Islington, London, N.; or at the Gaveller's office, Coleford, Gloucestershire, where the plans and sections may be seen.

STEAM-ENGINES AND WATER-WHEEL, &c., FOR SALE.

—A 32 in. cylinder CONDENSING PUMPING ENGINE, 9½ ft. stroke, cylinder quite new, with cylinder case; boiler 11 tons, and outfit complete.

A 14 in. cylinder HORIZONTAL DOUBLE CONDENSING PUMPING ENGINE, 5 ft. stroke, with a 5 ton boiler complete.

A 11¾ in. cylinder HIGH-PRESSURE TABLE ENGINE, with metallic piston, wrought-iron fly-wheel shaft, and 11 ft. diameter fly-wheel.

A WATER-WHEEL, 35 ft. diameter, 3½ ft. breast, oak axle and rings, two cranks, saddles and brasses; one 13 in. doorpiece, one 13 in. working barrel, one 11 in. ditto, various pumps and windbores. Also, a good balance-bob and shaft bob.

The above machinery is in very good condition, and will be sold cheap.—For further particulars, apply to Mr. W. B. HARVEY, Tavistock, Devon.

TO BE SOLD, BY PRIVATE CONTRACT, a new 40-inch

CYLINDER ENGINE, with boiler about 10 tons.—For a view of the same, apply to Capt. RICHARD REYNOLDS, Trelill, in the parish of St. Kew; and for further particulars, and to treat for the same, to Captain WILLIAM RICHARDS, Bank House, Redruth, Cornwall.

FOR SALE, OR HIRE, TWO 12-in. WINDING and PUMPING

ENGINES, ONE 9-in. PUMPING ENGINE, on strong wood frames for portability. BOILER with fittings, 4 tons (nearly new). Also, a 20 fms. 7-in. DRAWING LIFT complete, at 6s. 3d. per cwt.—Apply to J. S. PHILLIPS, Engineer, &c., Marazion.

FOR SALE, a 24 in. WHIM HORIZONTAL ENGINE, with a

10 tons boiler, nearly new, in excellent condition, and drawing machine attached As this engine is very superior in make and condition, parties requiring one will do well to examine it.—Apply to Mr. C. WESCOMB, 21, Southernhay, Exeter.

FOR SALE, BY PRIVATE CONTRACT, the HOLYFORD

MINES, CAPPAWHITE, TIPPERARY.—These mines are held under leases for an unexpired term of 49 years, at a royalty of 1-15th. The plant and materials comprise PUMPING and DRAWING STEAM-ENGINES AND MACHINERY, railway and dressing-floors, large WATER-WHEEL, with crushing and stamping machinery, and abundant supply of water for all purposes. Agents' houses, labourers' cottages, and all requisites for mining on an extensive scale. The mine has returned large profits, and is still yielding considerable quantities of ore. But an outlay for opening new ground is needed, which the present adventurers are not in a position to supply, the greater portion of the shares being held by parties residing abroad, and representatives of deceased shareholders.—For further particulars, apply to Captain PASCOE, on the mines; or to Mr. C. HUNT, 16, New Broad-street, London, E.C.

TO MINE PROPRIETORS.—TO LET, the CEFN GWYN

MINE, in the neighbourhood of Aberystwith. A 30 ft. water-wheel, with a pair of first-rate crushers and pumps, now on the mine and in excellent repair, may be procured from the late lessees, for cash or shares, or partly in either mode.—For particulars, apply to the Rev. LEWIS GILBERTSON, Jesus College, Oxford.

BRYNTAIL COAL TO BE LET.—This vein of coal is 4 feet in

thickness. It is the Red Ash coal vein, well known in the market under the name of the Mynydhysloyne Maes Mawr, Lantwit, and Gellygner vein. The pit where it has been discovered and proved to exist in abundance is 7 fms. only, through shale, fire-clay, and ironstone, rising at a very small angle to the north-east and north-west. The level to this pit will be about 50 yards in length, through the coal, from the surface. The extent of the coal field workable through this level is about 700 acres. The distance from the Glamorganshire Canal is less than half a mile; from the port of Cardiff, eleven miles; and from the Treforest station on the Taff Vale Railway, one mile. Mr. W. H. Harrison, the well-known mineral engineer, estimates the total cost of working out 100 tons of coal daily to the market, within nine months from the time the works will be commenced, at £1334.

All the other sublying measures of coal, ironstone, fire-clay, and limestone, in the South Wales mineral formations, are workable by level from a lower elevation, from the same estate, where there is an excellent situation to erect blast furnaces.

Further particulars as to terms of letting may be known on application to JOHN GRIFFITHS TRENERRY, Esq., 1, Nicholas-street, Bristol; Messrs. THOMAS WHITE and SONS, 11, Bedford-row, W.C., London; and Dr. WILLIAM PRICE, of Craigalla, Glamorganshire.

COLLIERY.—TO BE LET, on terms to be agreed upon, a valuable

and extensive COAL FIELD, in the best part of the county of STAFFORD, having every facility by canals and railway. It is bounded on three sides by collieries at work. Sunk through two seams of coal. The quality is second rate, but, owing to the vicinity of large towns and easy communication, the profits are as great as from a finer quality. Capital required, near £20,000.—For further particulars, apply to Messrs. BROOKS and BEAL, 209, Piccadilly.

TO LET, the COAL, IRONSTONE, and FIRE-CLAY, under

lands in the GWENDRAETH VALLEY, SOUTH WALES, belonging to Lieut.-Colonel S. Cowell Stepney, consisting of SEVENTEEN SEAMS OF COAL, varying in thickness from 2 to 9 ft.; numerous SEAMS of IRONSTONE, with ONE SEAM of BLACKBAND, about 16 in. thick.

The Gwendraeth Canal passes through the property, and leads to the South Wales Railway, as well as to the ports of Kidwelly and Pembrey; the latter port being about eight miles distant, and having a floating dock capable of accommodating vessels of 500 tons and upwards.—For further particulars and to treat, apply to CHARLES BERKELEY, Esq., solicitor, 52, Lincoln's Inn-fields, London; or to WILLIAM ROSSER, Esq., mining engineer, Llanelly, South Wales.

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PROCESS for the DESULPHURISATION of COAL, COKE, IRONSTONE, and IRON, will be undertaken and practically carried out, with economy and success, at any blast furnace for any party, for a consideration, by the undersigned.—BENJAMIN DAVIS, manager, Hope, near Mold, Flintshire.

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Works of all sizes, from 10 lights to 500 lights, estimated for. The construction is so simple, that the works can be entrusted to the management of an ordinary labourer or servant. For LIGHTING CORNISH MINES these works are well adapted, and at a cost of one-half below the usual outlay.—Apply to

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STEAM UNDER SIXTY DAYS ECLIPSED.
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Appointed to Sail from LIVERPOOL on the 5th of each Month FOR MELBOURNE,
Forwarding Passengers by Steam to various Ports in AUSTRALIA AND TASMANIA.

Ship.	Register.	Burthen.	Captain.	Date.
ELLEN STUART	1388	4000	BROWN	5th September.
GREYHOUND	1410	4000	DAVIES	5th October.
BRITISH TRIDENT	1555	3000	O'NEILL	5th November.
LIGHTNING	2090	4500	BYRNE	5th December.
MARCO POLO	1625	3500	CLARKE	5th January.
DONALD MCKAY	2604	5000	TOBIN	5th February.

The above line is composed of the LARGEST, the FINEST, and FASTEST MERCHANT SHIPS in the WORLD, and have been built by the most celebrated builders of the day, including M'Kay, of Boston. They are commanded by men who have already rendered themselves famous, and their equipments and accommodations are unequalled by any line of ships afloat.
The Black Ball Line has had the distinguished honour of a visit from Her Majesty the Queen, who was most graciously pleased to say that she had no idea there were such magnificent ships in her merchant navy.
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PASSAGE MONEY £14 AND UPWARDS.
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SAILING BETWEEN
LIVERPOOL AND MELBOURNE, on the 20th and 27th of every month, and forwarding Passengers by Steamers at through rates to ALL PARTS OF AUSTRALIA.
To the consignment of H. T. Wilson and Co., Melbourne.

Ship.	Captain.	Register.	Burthen.	To sail.
MERMAID	J. WHITE	1320	4500	Sept. 20.
TASMANIA	NOURSE	1198	4000	Sept. 27.
SHALIMAR	J. R. BROWN	1432	4500	Oct. 20.
RED JACKET	M. H. O'HALLORAN	2460	5000	—
WHITE STAR	T. C. C. KERR	2360	5000	—

The famous clipper ship *Mermaid*, Capt. James White, late chief officer of the *White Star*, will be dispatched as the packet of the 20th September, with mails, cargo, and passengers. She has made some of the quickest passages on record, and has sailed the extraordinary distance of 3740 geographical miles in 13 successive days. Her outward passages have been made in 72, 75, and 77 days, and from Melbourne to Liverpool in 75 and 77 days. Her saloons are handsome, and elegantly furnished.
The magnificent packet ship *Tasmania* is remarkably fast, and is now on her second voyage in this line. Her saloons are spacious, and handsomely furnished. Bed, bedding, and necessaries for saloon passengers in all the ships.
Passengers embark on the 20th and 27th of September.
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AUSTRALIA.—WHITE STAR CLIPPERS.—The famous clipper ship, MERMAID, 1320 tons register, 4500 tons burthen, Capt. JAMES WHITE, late chief officer of the *White Star*. This well-known and splendid clipper will be dispatched as the packet of the 20th Sept., with mails, cargo, and passengers. She has made some of the quickest passages on record, and has sailed the extraordinary distance of 3740 geographical miles in 13 successive days. Her outward passages have been made in 72, 75, and 77 days, and from Melbourne to Liverpool in 75 and 77 days. Her saloons are handsome and elegantly furnished. Bed, bedding, and linen for saloon passengers. Passengers embark on Monday, the 20th September.—For freight or passages apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool.

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All that can be desired in finish, taste, and design.—*Globe.*
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12 Table Forks, best quality	£ 1 16 0	£ 2 14 0	£ 3 0 0	£ 3 12 0
12 Table Spoons, best quality	1 16 0	2 14 0	3 0 0	3 12 0
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12 Dessert Spoons, best quality	1 7 0	2 0 0	2 4 0	2 14 0
12 Tea Spoons, best quality	0 16 0	1 4 0	1 7 0	1 16 0
2 Sauce Ladles, best quality	0 8 0	0 10 0	0 11 0	0 13 0
1 Gravy Spoon, best quality	0 7 0	0 10 6	0 11 0	0 13 0
4 Salt Spoons (gilt bowls), best qu.	0 6 8	0 10 0	0 12 0	0 14 0
1 Mustard Spoon, best quality	0 1 8	0 2 6	0 3 0	0 3 6
1 Pair Sugar Tongs, best quality	0 3 6	0 5 6	0 6 0	0 7 0
1 Pair Fish Carvers, best quality	1 0 0	1 10 0	1 14 0	1 18 0
1 Butter Knife, best quality	0 3 0	0 5 0	0 6 0	0 7 0
1 Soup Ladle, best quality	0 12 0	0 16 0	0 17 6	1 0 0
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Complete Service	£10 13 10	£15 16 6	£17 13 6	£21 4 6

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THE PATENT VALVE COMPANY, having effectually tested the working of their recently patented clack valve, and having made arrangements for supplying them, are PREPARED to RECEIVE ORDERS from the adventurers and managers of mines, and others, who may be desirous of adopting them. In introducing their valve to the notice of the mining public and others, the patentees have no hesitation in stating that the SAVING in the articles of leather and copper, and in the labour required for changing the clack valve now in general use, will, under ordinary circumstances, EQUAL SEVENTY-FIVE PER CENT., whilst they feel equally certain that in many cases the saving will far exceed that amount.
Full information, and terms for use of the patent right, can be obtained of Capt. JOHN DAVEY, manager of the United Mines, Gwennap, under whose inspection the valve has been for some time at work; of Capt. J. MAYNE, on the same mines; or by letter addressed to the Patent Valve Company, St. Day, Truro, Cornwall.
Dated August 25, 1858.

PATENT LEVER BREAK, FOR RAILWAY WAGONS, doing away with the objectionable break rack. Can be APPLIED to EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at 34, Great George-street, Westminster; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

MINER'S, SUMP, AND AGENT'S HAT CAPS.—COCKING AND SON, FELT AND SILK HATTERS, REDRUTH and PENZANCE, beg to inform directors, managers, and agents of mines, that they continue to SUPPLY MINER'S HAT CAPS (No. 1), SUMPMEN'S (No. 2), and AGENTS (No. 3), WARRANTED WATERPROOF, WHOLESALE on the most reasonable terms.
Orders for foreign mines punctually attended to, securely packed, and removed on board vessels, either at the Ports of Penzance or Hayle, free of shipping charges.
FELTS for SWIMMING COVERS and CLACK DOORS made to order at the shortest possible notice.—Dated Chapel-street, Penzance, June 24, 1858.

ARNOLD AND SONS, WIRE WORKERS, WEAVERS, AND IRONMONGERS TO HER MAJESTY.
NOS. 9, 12, AND 13, FORE STREET, DEVONPORT, DEVON.
ARNOLD and SONS being MANUFACTURERS of WIRE WORK, can with confidence ensure the strongest and best quality goods to all who entrust orders to their care.
MINES SUPPLIED with Brass and Iron Wire Sieves, Brass Machine Bottoms, Iron Cylinder Sifts, Copper Bottoms, Stamp Grates, Delewing Serges, &c.
MINING MATERIALS of every description supplied on the best terms.
Price Lists sent on application.
ARNOLD and SONS have a very extensive Stock of Furnishing, Navy, Army, and General Ironmongery.—Devonport, Three Doors above the Post-office.

THE ONLY GAUGE GLASSES THAT WILL STAND A PRESSURE FROM 100 lbs. TO 500 lbs.
Edinburgh, Perth, and Dundee, and Scottish Central Railways, Locomotive Department.—Perth, Dec. 20, 1856.
We have now used the Glass Tubes for Water Gauges, made by Mr. Tomey, for three years, and can recommend them to railway engineers. I have not seen any equal to them. ALEX. ALLAN, M. Inst. C.E., Locomotive Superintendent.
Are used on the London and North-Western, Eastern Counties, Midland, and all the principal railway lines in Great Britain. ENOCH TOMEY, Canal-street, Perth.

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD, MANUFACTURERS OF PATENT TUBULAR TUYERES.

HOT-BLAST FURNACE TUYERES, with sockets, 36s. each, without sockets, 35s. each; SMITHS' FORGE TUYERES, with sockets, 16s. each, without sockets, 15s. each; delivered at Chesterfield Station.

HALEY'S PATENT LIFTING JACK,
MANUFACTURED BY THE INVENTOR,
JOSEPH HALEY,
ALBION STREET, GAYTHORN, MANCHESTER.
SCREW JACKS, SHIP JACKS.
SLIDE AND CENTRE LATHES, PLANING, SHAPING, BORING, DRILLING, SCREWING, WHEEL CUTTING, AND OTHER MACHINES.
RIVET MAKING MACHINES.

BRICKS.—Messrs. OATES AND INGRAM inform brick makers on an extensive scale that their PATENT SOLID BRICK MACHINE is now THOROUGHLY and EFFICIENTLY TESTED, and are prepared to OFFER the following counties to the trade, in districts, either by ROYALTY or PURCHASE:—Middlesex, Surrey, Sussex, Essex, Kent, Norfolk, Suffolk, Cambridge, Oxford, Gloucester, Hertford, Berks, Bucks, Huntingdon, Devon, Cornwall, Dorset, Wilts, Hants, and Isle of Wight.
With this PATENT MACHINE the ordinary surface clay requires no preparation whatever, whilst that of a rocky nature has merely to be passed through rollers in the usual way, AND THENCE, WITHOUT ANY TEMPERING, INTO THE MACHINE, FROM WHICH THE BRICKS ARE REMOVED DIRECT TO THE KILN IN A STATE READY FOR BURNING.
The MACHINE is now making UPWARDS OF THIRTY BRICKS PER MINUTE at the works of Messrs. KIRK and PARRY, Government contractors, Fort Elson, near Gosport; and also at the Patent Solid Brick Works of T. WELLS INGRAM, Oldbury, near Birmingham.
Application for orders to see the machine in operation to be made to Messrs. OATES and INGRAM, Bradford-street, Birmingham. Samples of clay may be sent and passed through the machine, and the bricks burnt, or a sample brick will be sent to any party wishing to see one.

MESSRS. McNICOLL AND VERNON'S PATENT STEAM TRAVELLING CRANE.
This machine will be found invaluable at the GOODS DEPOTS of RAILWAYS, in the ERECTION of LARGE BUILDINGS, VIADUCTS, BRIDGES, &c., in IRON FOUNDRIES, STONEMASONS' YARDS, QUARRIES, SAW-MILLS, TIMBER YARDS, or in any place where the hoisting, piling, and conveying of heavy weights is necessary. ONE of them will do MORE WORK with two men than TWO ORDINARY TRAVELLING CRANES with five men each. Any ORDINARY TRAVELLING CRANE can be ALTERED to the PATENT PLAN.
The following are some of the parties who have used the cranes, viz.:—

Executors of the late Messrs. Samuel Ellis & Co., Ironfounders, Manchester	1 crane.
The Hull Dock Company	1 „
Messrs. Joseph Whitworth and Co., Tool Makers, Manchester	1 „
Messrs. Joseph Dowson and Co., Saw-Mill Proprietors, Lambeth	1 „
John Jay, Esq., Contractor, London	1 „
Messrs. Peto, Brassey, and Betts, Contractors, London	6 „
Messrs. John McNicoll and Co., Saw-Mill Proprietors, Liverpool	4 „

Applications for licenses and for estimates to be made to Mr. JOHN VERNON, Engineer and Iron Shipbuilder, Brunswick Dock, Liverpool.

MAPPIN'S DRESSING CASES AND TRAVELLING BAGS.—MAPPIN BROTHERS (Manufacturers by Special Appointment to the Queen) are the only Sheffield makers who supply the consumer in London. Their London Show Rooms, 67 and 68, KING WILLIAM STREET, LONDON BRIDGE, contain by far the LARGEST STOCK OF DRESSING CASES, and LADIES' and GENTLEMEN'S TRAVELLING BAGS, in the world, each article being manufactured under their own superintendence.
MAPPIN'S GUINEA DRESSING CASE, for gentlemen.
MAPPIN'S TWO GUINEA DRESSING CASE, in solid leather.
LADIES' TRAVELLING and DRESSING BAGS, from £2 12s. to £100 each.
GENTLEMEN'S ditto ditto, from £3 12s. to £80.
Messrs. MAPPIN invite inspection of their extensive stock, which is complete with every variety of style and price.
A costly Book of Engravings, with prices attached, forwarded by post on receipt of 12 stamps. MAPPIN BROTHERS, 67 and 68, King William-street, City, London; Manufactory, Queen's Cutlery Works, Sheffield.

DEAFNESS, NOISES IN THE HEAD.—INSTANT RESTORATION OF HEARING GUARANTEED and EXPERIENCED by one consultation, without operation or instruments. Dr. WATTERS, the Consulting Resident Surgeon to the Dispensary for Diseases of the Ear and Eye, 32, Spring-gardens, Charing-cross, London, pledges himself to CURE DEAFNESS of 40 or 50 years by a painless treatment, unknown in this country. The dispensary monthly reports show the daily cures, without failure. A book has been published for deaf persons in the country to cure themselves, sent on receipt of letter, enclosing five postage stamps.
Hours of consultation, Eleven till Four every day.

AN ACT OF GRATITUDE.
Five Thousand Copies of a Medical Book for Gratuitous Circulation.
GEORGE THOMAS, Esq., having been EFFECTUALLY CURED of a NERVOUS DEBILITY, LOSS OF MEMORY, and DIMNESS OF SIGHT, resulting from the early errors of youth, by following the instructions given in a medical work by a physician, he considers it his duty, in gratitude to the author, and for the benefit of nervous sufferers, to publish the means used. He will, therefore, send free, to any address, in a sealed envelope, on receipt of a directed envelope enclosing two stamps, to pre-pay postage, a copy of the medical work, containing every information required.—Address, G. THOMAS, Esq., Craven House, Newcastle-upon-Tyne.

AN ACT OF SINCERE GRATITUDE.
Five Thousand Copies of a Medical Work to be given away.
A CLERGYMAN OF THE CHURCH OF ENGLAND, having been cured of severe Nervousness, Pains in the Head, Loss of Memory, Indigestion, Debility, Prostration, and other fearful symptoms, not the least of which was the great mental anguish resulting from the terrors occasioned by the frauds of wicked pretenders, adopts this unusual mode of testifying his deep gratitude, by publishing, for the benefit of others, the means employed for his own marvellous restoration to health and happiness, to which he had long been a stranger. He will, therefore, send a copy of the remarkable book, containing all the necessary information, on receipt of two penny stamps to pre-pay postage.—Address, Rev. H. R. TRAVERS, M.A., 1, North Cumberland-place, Bayswater, Middlesex.
CAUTION.—The advertiser regrets to find that of late several disreputable quacks have dishonestly adopted this plan of puffing off their deceptive books.

VALUABLE MEDICAL BOOK GRATIS.—To those who have been drawn into the vortex of a pernicious secret habit, suicidal in its nature, as it drains the constitution of its nervous fluid, that vital principle which governs and regulates every function of our bodies, and to all who suffer from any secret affliction, pointing out the way to purity and health, a valuable medical book of 100 pages, 10,000 copies of which are being issued gratuitously by the Anatomical and Pathological Society of Great Britain, as a faithful monitor, showing the danger of those secret practices which are known to extensively prevail (especially at schools and colleges), and as a friendly guide to such as suffer from any secret disease, debility, or incapacity.
Most valuable to those who feel an interest in the subjects treated of, showing sufferers the means of recovering perfect health.—*Medical Journal.*
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THE GREAT EUROPEAN REMEDY FOR NERVOUSNESS, RELAXATION, AND EXHAUSTION.—Protected by Royal Letters Patent, and sanctioned by all the great Continental Colleges of Medicine.
DR. DE ROOS' CELEBRATED GUTTÆ VITÆ, OR LIFE DROPS, are the great European remedy for Spermatorrhœa, Exhaustion, Nervousness, Debility, Incapacity for Society, Study, or Business, Shaking of the Hands and Limbs, Indigestion, Flatulency, Shortness of Breath, Consumptive Habits, Dimness of Sight, Dizziness, Pains in the Head, Eruptions, Blotches, Pimples, Sore Throat, Pains in the Bones and Joints, Scurvy, Scrofula, and all those diseases for which mercury, sarsaparilla, &c., are not only employed in vain, but too often to the utter destruction of the sufferer's health. Their almost marvellous powers must be felt to be believed. Hundreds of apparently hopeless cases, which had been given up by the faculty, have been speedily cured, and many thousands have derived almost miraculous relief, when everything else had signally failed.
Price 11s., and four times the quantity 33s. per bottle, obtainable through all medicines vendors; of whom also may be had the *Medical Adviser*, 2s. 6d. in sealed envelope; or it may be sent direct from the author for 42 penny stamps.
Advice and medicines sent to any address secure from observation, on receipt of a full detail of the case and the usual fee of £1. Post-office orders payable at the Holborn Office to Walter De Roos, M.D., 10, Berner-street, Oxford-street, London. Hours for personal consultation daily from Eleven till Four, Sundays excepted.
N.B. Should difficulty arise in procuring the above, enclose the amount per Post-office order, or otherwise, to 10, Berner's-street, and they will be sent securely packed per return.

HOLLOWAY'S OINTMENT AND PILLS AGAIN SUCCESSFUL IN CURING A BAD LEG.—Mr. E. Williams, of Dyliffe Mines, Machynlleth, states that a friend of his in Flintshire suffered for two years with a dreadful bad leg, which defied the efforts of several persons to cure, notwithstanding various remedies were tried. He endured excruciating pain for several months, and when paying him a visit he recommended him to use Holloway's Ointment and Pills, from the effects of which a change for the better was quickly produced, and ultimately his leg was soundly cured. He now enjoys excellent health. Mr. Williams will satisfy any party of the truth of this statement.—Sold by all dealers in medicine, and at Prof. Holloway's establishment, 244, Strand, London.

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120	Alfred Consols (cop.), Phillack* [S.E.]	£2 11 10	£ 8¾	8¼ 8¾	£19 3 0 .. £0 4 0	—Aug. 15, 1858.
1624	Balleswidden (tin), St. Just	11 5 0	5		12 5 0 .. 0 5 0	—Jan. 1, 1854.
10000	Bampfylde (copper), Devon	0 12 6	1¼		0 0 7½ .. 0 0 7½	May 12, 1858.
4000	Bedford United (copper), Tavistock†	2 6 8	6¼		10 3 0 .. 0 4 0	—June 18, 1858.
240	Boscean (tin), St. Just	20 10 0	65		21 0 0 .. 3 0 0	—Sept. 4, 1857.
200	Botallack (tin, copper), St. Just*	91 5 0	170		425 15 0 .. 2 10 0	—Aug. 17, 1858.
1200	Brightside and Froggatt Grove, Derbyshire	3 0 0	3½		3 0 0 .. 3 0 0	—April 30, 1856.
100	Brynford Hall (lead), Flintshire	25 0 0	50		13 0 0 .. 5 0 0	—July 31, 1856.
1000	Bryntail, Llanidloes, Montgomeryshire	7 15 0	1¼		0 5 0 .. 0 5 0	—July 1, 1856.
380	Budnick Consols (tin), Perran	2 2 6	4¼		0 10 0 .. 0 10 0	—March 26, 1857.
6000	Bwich (silver-lead), Cardiganshire	3 5 6	1¾		0 2 6 .. 0 2 6	—July 30, 1856.
4096	Calstock Consols (copper)	5 0 0	5¾ 5		0 2 6 .. 0 2 6	—Dec. 23, 1857.
1000	Carn Brea (copper, tin), Illogan	15 0 0	54 52 54		243 10 0 .. 2 0 0	—Aug. 5, 1858.
2048	Carnyorth (tin), St. Just	4 10 0	6		0 15 0 .. 0 3 0	—June 16, 1856.
200	Cefn Cwm Brwyno (lead), Cardiganshire	33 0 0	43		5 0 0 .. 2 0 0	—March 25, 1858.
2000	Collacombe (copper), Lamerton	5 0 0	15	12¼	2 5 0 .. 0 8 0	—Dec. 2, 1857.
256	Condurrow (copper, tin), Camborne [S.E.]	20 0 0	60	60	85 0 0 .. 2 0 0	—June 10, 1857.
12000	Copper Miners of England	25 0 0	27		7½ per cent.	— Half-yearly.
300000	Ditto ditto (stock)	100 0 0	30		1 per cent.	— Half-yearly.
1055	Craddock Moor (copper), St. Cleer	8 0 0	38½	34	1 14 0 .. 0 5 0	—July 9, 1858.
30000	Craven Moor, Limited (lead), Yorkshire	0 10 0	¾		0 0 9 .. 0 0 9	—Feb. 28, 1856.
128	Cwmystwith (lead), Cardiganshire*	60 0 0	250		140 0 0 .. 15 0 0	—Aug. 19, 1858.
280	Derwent Mines (silver-lead), Durham	300 0 0	150		122 0 0 .. 10 0 0	—June 25, 1857.
4076	Devon and Cornwall (copper)	4 6 3	9		0 7 6 .. 0 2 6	—April 20, 1858.
1024	Devon Great Consols (cop.), Tavistock* [S.E.]	0 0 0	465	455 465	625 0 0 .. 8 0 0	—July 23, 1858.
672	Ding Dong (tin), Gulval†	35 5 0	16	12½	16 7 6 .. 1 10 0	—March 2, 1857.
179	Dolcoath (copper, tin), Camborne*	257 15 0	270		967 0 0 .. 7 0 0	—Aug. 9, 1858.
12800	Drake Walls (tin, copper), Calstock	2 0 0	1¾	1¾	0 13 6 .. 0 2 0	—Sept. 11, 1857.
300	East Daren (lead), Cardiganshire*	32 0 0	115		48 0 0 .. 3 0 0	—Aug. 12, 1858.
2048	East Falmouth (copper), Gwennap	2 0 0	3		0 7 6 .. 0 2 6	—Jan. 25, 1858.
128	East Pool (tin, copper), Pool, Illogan*	24 5 0	175		305 0 0 .. 2 10 0	—Aug. 30, 1858.
1024	East Wheal Margaret (tin, copper)	7 17 6	3	2	0 5 0 .. 0 5 0	—Jan. 11, 1854.
5700	Exmouth (silver-lead), Christow	4 14 0	8		3 15 0 .. 0 2 6	—April 27, 1858.
1400	Eyam Mining Company (lead), Derbyshire	5 0 0	38		18 13 4 .. 1 0 0	—Aug. 26, 1858.
4940	Fowey Consols (copper), Tywardreath	4 0 0	3¼		41 4 3 .. 0 6 0	—Feb. 17, 1857.
4448	General Mining Co. for Ireland (cop., lead)	4 0 0	1¾	1¾	1 0 8 .. 0 3 3	—June 5, 1853.
2000	Gogiman (silver-lead), Cardiganshire	11 5 0	2¾		22 0 0 .. 0 5 0	—Sept. 5, 1850.
1024	Gonamena (copper), St. Cleer	13 15 0	12		0 7 6 .. 0 7 6	—Dec. 21, 1852.
243	Grambler and St. Aubyn (copper)	109 10 0	150	140 145	12 0 0 .. 2 0 0	—July 5, 1858.
6000	Great South Tolgus [S.E.] Redruth	0 14 6	16	15 15½	2 12 6 .. 0 6 0	—Aug. 19, 1858.
26666	Great Wheal Vor (tin, cop.), Helston [S.E.]	8 7 6	3½	3 3¾	0 5 0 .. 0 5 0	—Oct. 22, 1855.
119	Great Work (tin), Germoe	100 0 0	110		221 10 0 .. 7 10 0	—Feb. 27, 1857.
1024	Herodsfoot (lead), near Liskeard	8 10 0	7	6¾ 7¼	4 7 6 .. 0 12 6	—June 11, 1858.
6000	Hingston Down Consols (copper), Calstock	3 12 6	3½	3 3½	2 16 0 .. 0 2 6	—Nov. 25, 1856.
2000	Holyford (copper), near Tipperary	11 0 0	8¾		4 2 6 .. 0 5 0	—Jan. 28, 1857.
2560	Isle of Man, Limited (lead)†	25 0 0	42		58 8 3 .. 1 0 0	—June 22, 1858.
76	Jamaica (lead), Mold, Flintshire	3 13 6	—		380 0 0 .. 5 0 0	—March 10, 1851.
20	Laxey Mining Company, Isle of Man	100 0 0	1000		1420 0 0 .. 50 0 0	—June 30, 1857.
160	Levant (copper, tin), St. Just	2 10 0	120		1071 0 0 .. 5 0 0	—Aug. 17, 1858.
5000	Lewis Mines (tin, copper), St. Erth	6 1 11	2		0 10 0 .. 0 10 0	—Dec. 20, 1855.
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	120		315 10 0 .. 2 0 0	—Aug. 5, 1858.
6000	Marke Valley (copper), Caradon	4 10 6	3	2¼	0 5 6 .. 0 3 0	—Sept. 7, 1855.
5000	Mendip Hills (lead), Somerset	3 15 0	1¾		1 13 6 .. 0 6 0	—May 31, 1858.
5000	Merllyn (lead), Flint	3 2 6	⅞		1 11 0 .. 0 2 6	—June 22, 1853.
1800	Minera Mines, Limited (lead), Wrexham	25 0 0	125		30 2 6 .. 3 0 0	—May 8, 1858.
20000	Mining Company of Ireland (cop., lead, coal)	7 0 0	14½	14½	13 13 4 .. 0 5 7	—July 1, 1858.
5000	Nanteos and Penrhiw, Limited (£2½ shares)	1 17 6	1¾	1	0 1 6 .. 0 1 6	—April 30, 1855.
6400	Nether Hearth, Westmoreland	0 7 0	1⅞		0 2 0 .. 0 1 0	—May 21, 1856.
470	Newtonards Mining Company, Co. Down†	50 0 0	35		55 0 0 .. 1 0 0	—July , 1858.
200	North Pool (copper, tin), Pool	40 18 0	10		324 0 0 .. 2 0 0	—Dec. 26, 1854.
700	North Roskear (copper), Camborne	12 0 0	24	21	750 0 0 .. 4 0 0	—Sept. 26, 1853.
6000	North Wheal Basset (cop., tin), Illogan* [S.E.]	nil.	9¾	9⅞ 10¼	14 12 0 .. 0 5 0	—Aug. 25, 1858.
6400	Par Consols (copper), St. Blazey [S.E.]	1 2 6	17	16½ 17	32 5 0 .. 0 11 0	—July 6, 1858.
500	Peak United (lead), North Derbyshire	7 15 0	2¼		4 10 0 .. 0 10 0	—April 12, 1856.
200	Phœnix (copper, tin), Linkinghorne	100 0 0	370	330	269 10 0 .. 25 0 0	—May 5, 1858.
1000	Polberro (tin), St. Agnes (Preferential)	15 0 0	5		18 11 9 .. 1 0 3	—July 11, 1857.
1772	ditto ditto (Old and ditto)	—	5		1 0 0 .. 0 10 0	—March 2, 1858.
560	Providence Mines (tin), Uny Lelant†	20 13 2	62½	60 62¼	76 4 6 .. 2 0 0	—Aug. 25, 1858.
2500	Rhoswydol and Bacheiddon (lead)	11 5 0	12		0 16 0 .. 0 3 0	—July 21, 1858.
512	Rosewarne United (copper, tin), Gwinear*	12 0 0	45	30 32¼	32 10 0 .. 1 10 0	—June 8, 1857.
15000	Ruardean Colliery Company, Limited	0 5 0	¼		0 0 10¼	0 0 6—Feb. 4, 1858.
12000	Sortridge Consols (cop.), Whitchurch [S.E.]	0 6 0	1¼	1⅛	0 10 0 .. 0 2 6	—July 27, 1857.
256	South Caradon (copper), St. Cleer* [S.E.]	2 10 0	405	405	530 0 0 .. 10 0 0	—July 27, 1858.
128	South Crinnis (copper), St. Austell	19 0 0	285		60 0 0 .. 20 0 0	—June 18, 1855.
512	South Tolgus (copper), Redruth, Cornwall	8 0 0	75	72½ 75	76 0 0 .. 1 0 0	—Aug. 5, 1858.
496	South Wheal Frances, Illogan* [S.E.]	18 18 9	205	215	301 5 0 .. 7 0 0	—July 5, 1858.
1024	Spearne Consols (tin), St. Just, Cornwall	3 12 0	1½	2 2¼	8 8 6 .. 0 2 6	—Dec. 10, 1853.
280	Spearne Moor (copper), St. Just†	23 7 8	15		4 5 0 .. 0 10 0	—June 13, 1856.
970	St. Aubyn and Grylls (cop., tin), Breage	6 8 4	4½	2½	0 17 6 .. 0 7 3	—April 1, 1852.
20000	St. Day United (tin and copper)	2 0 0	⅝	⅝	0 3 6 .. 0 1 0	—Feb. 23, 1858.
476	St. Ives Consols (tin), St. Ives	16 0 0	30		917 10 0 .. 1 10 0	—Aug. 17, 1858.
9600	Tamar Consols (silver-lead), Beerralston [S.E.]	4 10 0	⅝	⅝	4 13 6 .. 0 2 6	—Feb. 7, 1856.
6000	Tincroft (copper, tin), Pool, Illogan [S.E.]	9 0 0	3¾	3¾ 4	8 18 6 .. 0 15 0	—Sept. 2, 1858.
572	Trelyon Consols (tin), St. Ives	11 10 0	9½		1 15 0 .. 1 0 0	—Feb. 24, 1854.
120	Trethellan (copper), Gwennap, Cornwall	15 10 0	15		403 13 6 .. 2 10 0	—April 29, 1851.
4096	Trewcatha (silver-lead), Menheniot, Cornwall	2 14 0	1¼	1 1⅛	1 12 0 .. 0 3 0	—April 2, 1857.
100	Trumpet Consols (tin), near Helston	95 0 0	12½	11	55 0 0 .. 5 0 0	—Dec. 20, 1854.
400	United Mines (copper), Gwennap [S.E.]	40 0 0	95	80 85	61 5 0 .. 2 0 0	—Feb. 12, 1856.
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 12 6	1	¾ ⅞	0 5 9 .. 0 1 0	—July 8, 1858.
512	Wendron Consols (tin), Wendron	23 7 8	35		2 0 0 .. 1 0 0	—Sept. 22, 1857.
6000	West Basset (copper), Illogan* [S.E.]	1 10 0	22	21 22	14 1 0 .. 0 14 0	—July 28, 1858.
256	West Caradon (copper), Liskeard [S.E.]	20 0 0	100	95	287 5 0 .. 2 0 0	—May 26, 1858.
512	West Damsel (copper), Gwennap	12 17 0	115		22 0 0 .. 2 0 0	—July 20, 1857.
6400	West Fowey Consols (tin and copper)	7 0 0	8¼		0 2 6 .. 0 2 6	—March 5, 1858.
1024	West Providence (tin), St. Erth†	2 11 7	3	1 1¼	33 1 9 .. 0 10 0	—April 8, 1857.
400	West Wheal Seton (copper), Camborne*	38 10 0	270	270	132 0 0 .. 7 10 0	—Aug. 17, 1858.
6140	Wheal Arthur (copper), Calstock	2 1 0	1	⅝	6 10 0 .. 0 10 0	—Oct. 25, 1855.
240	Wheal Bal (tin), St. Just	15 0 0	18		2 10 0 .. 0 10 0	—May 11, 1858.
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	200	190 200	495 10 0 .. 6 0 0	—Aug. 3, 1858.
256	Wheal Buller (copper), Redruth* [S.E.]	5 0 0	190		685 0 0 .. 7 10 0	—July 20, 1858.
1024	Wheal Charlotte, Perranuthnoe	5 3 4	7		1 10 0 .. 0 10 0	—Sept. 9, 1855.
250	Wheal Clifford (copper), Gwennap	—	260		42 0 0 .. 3 0 0	—Oct. 26, 1857.
4096	Wheal Edward (copper), Calstock [S.E.]	5 10 0	4½	3½ 4	6 5 0 .. 0 5 0	—March 30, 1858.
5000	Wheal Fortescue (copper), Bodmin	nil.	1		0 2 4 .. 0 1 6	—Jan. 14, 1856.
128	Wheal Friendship (copper), Devon	50 0 0	80		2385 10 0 .. 10 0 0	—Feb. 11, 1858.
1024	Wheal Grylls (copper, tin), Breage	0 4 0	⅛		0 2 0 .. 0 2 0	—Feb. 24, 1857.
512	Wheal Jane (silver-lead), Kea	3 10 0	20		8 10 0 .. 1 10 0	—Oct. 16, 1857.
5000	Wheal Kitty (tin), St. Agnes	4 10 0	4	3¾ 4	0 6 0 .. 0 3 0	—March 24, 1857.
1024	Wheal Kitty (tin), Uny Lelant† [S.E.]	1 7 2	9	8¼	6 0 0 .. 1 0 0	—Sept. 17, 1857.
430	Wheal Lovel (tin), Wendron	33 0 0	5		31 0 0 .. 1 0 0	—Sept. 5, 1856.
448	Wheal Margaret (tin), Uny Lelant	19 15 0	61	59 61	87 10 0 .. 2 10 0	—May 23, 1858.
1024	Wheal Mary Ann (lead), Menheniot† [S.E.]	8 0 0	47	44 45½	35 17 6 .. 2 5 0	—June 8, 1858.
80	Wheal Owles, St. Just, Cornwall	70 0 0	300		225 13 0 .. 5 0 0	—Aug. 20, 1858.
240	Wheal Reeth (tin), Uny Lelant	39 10 0	27½		40 10 0 .. 3 0 0	—Aug. 25, 1852.
198	Wheal Seton (tin, copper), Camborne*	107 0 0	135		286 10 0 .. 2 0 0	—Oct. 12, 1857.
1040	Wheal Trelawny (silver-lead), Liskeard [S.E.]	4 10 0	25½	23½ 24½	33 10 0 .. 1 0 0	—July 26, 1858.
1024	Wheal Tremayne (tin, copper), Gwinear	11 2 6	10		10 2 6 .. 0 7 6	—Jan. 11, 1854.
4096	Wheal Wrey (lead), St. Ives†	1 9 0	1¼	2¼ 3	2 12 6 .. 0 2 6	—Dec. 22, 1857.
5000	Wicklow (copper), Wicklow	5 0 0	30½ xd.	32	36 5 6 .. 1 10 0	—July 16, 1858.

[* Dividends paid every two months. † Dividends paid every three months.]

FOREIGN MINES.

10000	Alten and Quænangen United (cop.), Norway	16 10 0	1	1	£ 4 5 0	£0 15 0—Nov. 21, 1853.
2464	Burra Burra (cop.), South Australia	5 0 0	135 xd.		195 0 0	5 0 0—March 3, 1858.
12000	Cobre Copper Company (cop.), Cuba [S.E.]	40 0 0	41	39 41	86 12 0	1 0 0—Jan. 26, 1858.
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	12½	11½ 12¾	5 18 0	0 10 0—March 19, 1858.
7000	English and Australian	5 0 0	1⅜		0 7 6	0 2 6—Feb. 23, 1858.
30000	General Mining Assoc., Nova Scotia [S.E.]	15 0 0	20	19 20	11 2 6	0 17 6—June 23, 1858.
15000	Linares (lead), Pozo Ancho, Spain [S.E.]	3 0 0	9¾	9¾ 9¾	5 10 6	0 8 4—March 30, 1858.
10000	Lusitanian (of Portugal) [S.E.]	1 15 0	1	1 1½	0 8 9	0 2 6—June 10, 1858.
138815	Mariquita and New Granada [S.E.]	1 0 0	1	⅝	0 6 6	0 1 6—July 29, 1858.
10000	Pontgibaud (silver-lead), France [S.E.]	20 0 0	7	5 7	1 0 0	1 0 0—June 26, 1855.
7000	Royal Santiago (copper), Cuba [S.E.]	16 15 0	⅜	⅛ ⅜	33 0 0	1 5 0—July 12, 1848.
11000	St. John del Rey (Limited), Brazil	15 0 0	12	11 12	35 7 6	1 0 0—June 19, 1857.
43174	United Mexican (silver), Mexico [S.E.] Av.	28 5 0	3⅛	2⅞ 3⅛	1 16 6	0 4 0—Feb. 14, 1853.
188676	North British Australasian [S.E.]	1 0 0	⅞		0 3 11	0 1 3—Feb. 25, 1857.

NON-DIVIDEND FOREIGN MINES.

Shares.		Paid.	Last Price.	Present.
20000	Acadian Charcoal Iron [L.]	7 0 0	6	
20000	Australian (copper) [S. E.]	7 5 0	⅛	⅜ ⅝
75000	Bon Accord (copper) [L.]	0 10 0	1½	¼ ½
10000	Brazilian Land & Mining [L.]	5 0 0	1⅛	
6000	Central American (silver) [L.]	5 0 0	—	
25000	Central Italian (copper) [L.]	2 0 0	—	
50000	Clarendon Cons. (cop.) [S. E.]	0 12 6	..4s. 6d.	
53040	Cologne Mining Co. (lead)	1 4 0	⅛	
10000	Copiapo Smelting [L.]	10 0 0	12½	11 13
75000	Dun Mountain (copper) [L.]	1 0 0	⅜	⅛ ⅜
15000	East Indian Coal [L.]	10 0 0	10	
20000	Ellerslie & Bardowie, Jamaica	0 14 0	1¼	
2000	English Ridge, Newfnd. [L.]	0 10 0	5	5
25000	Fortuna (lead)	2 0 0	2½	1⅞ 2½
10000	Gt. Barrier Land, Mining, &c.	1 10 0	1½	
2309	Kinzigthal Min. Ass., Germ.	4 0 0	1	
25000	Levant Mineral [L.]	10 0 0	1	
40000	London and Virginia (gold)	1 0 0	1	

PROGRESSIVE MINES.

Shares.		Paid.	Last Price.	Present.
6000	Abbey Consols (id.) Cardigan.	0 18 6	1	
10000	Angarrack (copper), Phillack.	1 0 0	1½	
256	Antron Consols (cp.), St. Erth	9 7 3	8	
1000	Ashburton United (cop., tin)	4 0 0	4	
10000	Ballymoneen (copper)	2 0 0	—	
4000	Ballyvirgin (lead) [L.]	4 5 0	2¼	
10000	Bampfylde (copper), Devon.	0 12 6	1	6½
1000	Barf (lead), Keswick	1 5 0	3⅜	
1024	Basset Consols, Illogan	1 10 0	1	
6000	Basset Graze Untd (cp.), Ken	1 10 0	—	
4000	Bedford Consols (copper)	1 0 0	⅛	⅛
506	Bell and Lanarth, Gwennap	16 15 0	5	
2000	Berehaven (cop Ireland	1 0 0	1¼	
250	Berriow Consols (lead)	14 16 0	8	
5000	Boiling Well (cp.), Gwithian	3 10 0	1¾	1⅛
20000	Bog (lead), Salop [L.]	1 10 0	—	
6000	Bolenowe (copper)	1 17 6	1	
1258	Boscaswell (tin and copper)	—	5	
20000	Bream Iron Mining Co. [L.]	0 10 0	½	
1120	Bridf Consol	8 8 0	7¼	
5000	Bristol & Fore of Dean [L.]	1 0 0	—	
4000	Brook Wood, B ckfastleigh	0 12 6	1	
2000	Bronfloyd (4l. 5s. paid) [L.]	4 0 0	6¼	

Shares.		Paid.	Last Price.	Present.
40000	Mount Carbon (coal), Virginia	1 0 0	⅜	
1000	Mount Gabriel Mineral [L.]	10 0 0	—	
60000	New Granada (gold) [S. E.]	1 0 0	¾	⅛ ⅜
10000	New Grand Duchy of Baden	0 12 6	2⅜	2 2½
50000	Newfound. Min. Ass. [L.]	0 2 0	⅜	⅛
5000	New Holtzappel Mining [L.]	1 0 0	1	
16000	Nouveau Monde (cop.) [S. E.]	1 0 0	⅛	⅛
65000	Piedmontese (copper) [L.]	1 0 0	—	
100000	Port Phillip (gold)	1 0 0	⅛	
50000	Quartz Reduction [L.]	1 0 0	¾	
6000	Rossie and Canada (lead)	10 10 0	—	
47795	Strathaibyn (copper) [L.]	1 0 0	—	
7820	Ditto, Preference, 10 per cent.	1 0 0	—	
2000	Turk's Head (copper) [L.]	0 10 0	5	
1000	Western African Malachite	85 0 0	80	100
35425	Wheal Jamáica (copper)	0 17 0	18s.	
75000	Wildberg (silver-lead, copper)	2 0 0	½	⅛
100000	Worthing (copper) [L.]	0 14 0	5s. 6d.	⅛

Shares.		Paid.	Last Price.	Present.
4000	Bryngias (lead), Cwmystwith	0 15 0	1¾	1¾
6000	Buckland Consols (copper)	0 5 0	⅛	
6380	Buller and Basset Unit. (cop.)	2 5 0	2½	2¼ 2½
1200	Buller and Bertha (copper)	2 10 0	1	
5000	Cae-Cynon, Cardiganshire	0 10 6	⅛	
600	Calcot Hall (lead), Limited	10 0 0	—	
1775	Calstock United (tin and cop.)	6 15 0	1	
915	Calvadnack, Wendron	11 0 10	5¾	
1000	Camborne Consols (lead)	14 10 0	8	
4500	Camborne Vean & Wh. Francis	3 16 0	2¼	1¾ 2
680	Cambrian Slate	25 0 0	—	
1204	Caradon Cons. (cop.), St. Cleer	11 0 0	4	
1000	Cardiganshire Consols [L.]	4 0 0	—	
6000	Cardigan South Bog. (lead)	1 0 0	2	
916	Cargoll (silver lead), Newlyn	12 7 3	11	
2580	Carmarthen United (lead) [L.]	2 10 0	3	
4370	Carnewas (id., cop.), Mawgan	0 13 0	1	⅛ ¼
7900	Carnock Dewa United, St. Ives	2 2 6	—	
1055	Carvannall (cop.), Gwennap	11 0 0	2½	3¼
6400	Carvath United, St. Austell	2 17 6	⅞	
10000	Carway & Duffryn (coal) [L.]	2 10 0	5	
6400	Castell (lead & blende), Card.	0 11 6	..3s. 6d.	
8762	Catherine & Jane Cons. (lead)	0 14 0	⅜	
6000	Cefn Gwyn (silt -ld.), Cardigan	1 0 0	⅛	
32	Cheesewring Granite	300 0 0	—	
6000	Chollacot Consols (copper)	0 5 6	3s.	
2000	Clara (silver-lead) [L.]	2 10 6	2¼	
1024	Clijah & Wentworth (tin, cp.)	24 6 6	5	3
3400	Coed Mawr Pool (lead) [L.]	5 0 0	—	
12000	College Mines (lead), Ireland	0 5 0	⅛	
2450	Cook's Kitchen (cop.) Illogan	16 10 9	6	4½
256	Copper Hill (copper), Redruth	48 0 0	90	2
12000	Cornwall Great Con. (id., &c.)	2 0 0	2¼	2
12000	Creiake (cop.), Tavistock	—	5	
6000	Crowndale (cop.), Tavistock	0 7 0	3½	3
40	Cwmdyie (copper) [L.]	50 0 0	—	
867	Cwm Erfin (lead) Cardigansh.	7 10 0	14	
6000	Cwm Sebon (lead), Limited	2 6 6	1¼	
21000	Dale, North Staffordshire [L.]	1 0 0	⅛	
2145	Dalrhiew (id.,), Rhayader [L.]	2 18 0	5	
1000	Daren (sil.-lead), Cardigansh.	6 0 0	4½	
3907	Devon and Courtenay (cop.)	1 0 6	⅛	
4000	Devon Burra Burra (copper)	5 5 0	1¾	
6240	Devon Great Elizabeth (cop.)	1 2 0	1½	
4566	Devon Wheal Buller (copper)	1 18 6	¾	⅜
6000	Devon Wh. Union (cp.) Tavis.	1 0 0	5	
4315	Duke of Cornwall, Lostwithiel	5 9 4	3¾	
3000	Dyfngwm (lead), Wales	12 6 6	12	
256	Eaglebrook, Llanfihangel, Car.	40 0 0	30	
4096	East Alfred Consols (copper)	1 19 4	1⅛	
85	East Balleswidden, Sancreed	21 15 0	20	
512	East Basset (copper), Redruth	29 10 0	100	..97½ 100
1024	East Buller (copper), Redruth	13 0 0	1¼	
6000	East Carn Brea (cop.) Redruth	0 19 0	6	
6144	East Caradon (cop.), St. Cleer	2 2 6	1¾	
6000	East Cornwall Con. (tin & cp.)	2 10 0	3	
4096	East Gonamena (copper)	0 1 3	⅛	
4000	E. Gunnis Lake & S. Bedf. (cp.)	4 2 6	1½	
5000	East Hender (copper), Crowan	0 12 0	⅛	
6000	East Kitt Hill (tin), Calstock	0 15 0	1⅜	
4096	East Providence (tin), Uny Lel	0 17 0	⅝	
5000	E. Rosewarne (cp., tin), Gwin.	1 13 6	½	
9000	East Tamar (sl.-id.) Beerferris	2 19 0	1	⅛
256	East Tolgus (copper), Redruth	47 0 0	50	50 55
1000	East Trefusis (cp.), Gwen	4 18 0	2¼	
119	E. Wheal Agar (cop.), Illogan	67 0 0	10	
1024	East Wheal Busy	0 10 0	50	
6000	E. Wheal Clifford (cop.), Kea	2 0 0	1¼	
10000	East Wheal Robert (copper)	0 7 6	⅛	
4000	E. Wheal Russell, Tavistock	4 16 0	6½	5¾ 6
1020	Esgair Llee [L.]	10 0 0	11½	
25000	Forest of Dean & S. Wales Iron	10 0 0	—	
5000	Frank Mills (lead), Devon	3 8 6	4	
5000	Fee Donald (lead)	0 8 0	⅛	
2820	Garreg (lead), Flint	2 16 0	⅜	⅛
4000	Gawton (copper), Tavistock	3 11 6	⅝	⅛
6000	Gellirheiron (sil.-ld.), Cardig.	1 0 0	1	
6000	Gerriant (slate) Beddgeiert [L.]	0 8 0	8s.	
6000	Gernick	1 0 0	1½	
1024	Gilmar (tin), St. Erth	6 16 6	⅜	
12000	Great Caradon and Slade [L.]	1 0 0	1½	
4096	Great Caradon (cop.), St. Ive.	0 6 0	⅜	⅛
6000	Gt. Crinnis (cop.), St. Austell	1 0 0	1¼	
4000	Gt. Dowgas (tin, &c.) St. Aust.	5 10 0	5½	
6000	Gt. E. Tamar (ld.), Beerferris	—	⅜	
15000	Great Hewas United, (tin)	1 19 0	1	⅜
12000	Great Northern [L.]	1 0 0	—	
11742	Great Onslow Con., Camelford	1 0 0	1	
1024	Gt. Sheba Con., Stoke Clims.	25 2 0	3	
12000	Great Sortridge, Whitchurch	0 6 6	—	
6000	Gt. Tamar (sil.-ld.) Beeralston		⅜	
14000	Gt. Tregune Consols, Altarnun	1 0 6	1¼	
6000	Gt. W. Sortridge, Whitchurch	1 6 0	—	
5120	Great Wheal Alfred [S.E.]	11 14 11	5½	4 4½
5120	Great Wheal Badderu (tin)	3 13 0	⅛	
6000	Gt. Wh. Busy (cp. & tin), Ken.	8 10 0	3½	3¼ 3½
1024	Gt. Wheal Fortune, Breage	27 13 10	7	
10000	Great Wheal Martha (cop.)	0 5 0	..6s. 6d.	
8634	Gwydyr Park Con., Llanrwst	0 8 3	⅜	
6400	Harwood (lead) [L.]	1 0 0	—	
7728	Hawkmoor (in, cop.) Calstock	2 1 0	1	
160	Herward United (lead) Flint	66 0 0	5	
5000	Holmbush (id., cp.) Callington	4 14 0	1½	1 1⅛
5000	Huckworthy Bridge (cop.)	0 5 6	⅛	
4096	Huntingdon (tin)	1 2 6	1	
5000	Kelly Bray (id., cp.) Callington	3 19 6	2¼	2 2½
2048	Kenegey, (cop., &c.) Breage	1 4 7	2	
6000	Keswick (lead), Portinscale	4 9 6	1½	
6500	Kinnerton (lead), Salop	1 3 0	1⅛	
6000	Lady Bertha (cop.) [S.E.]	1 3 0	⅛